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WILDLIFE REVIEW

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WILDLIFE REVIEW

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Except as indicated, abstracts are by Kenneth J. Chiavetta, editor.

NATURAL RESOURCES & CLIMATE

Crockett, Lawrence J., editor. SOME CONTRIBUTIONS TO THE FLORISTICS, PLANT ECOLOGY, AND GEOLOGY OF THE HUDSON HIGHLANDS SECTION OF THE LOWER HUDSON VALLEY. Sarracenia no. 11. p. 1-89, illus. June 1967. WR 128: 2

[City Coll., New York, N.Y.] Includes the following papers: A memorial to Dr. John Torrey, Jack Focht; An introduction to the geologic setting of the Newburgh-Hudson Highlands sector of the Lower Hudson Valley, A. W. McCrone; History of Sterling Forest, Suzanne Keatinge; Northeastern flora: an unfinished task (abstract), P. Dansereau; The marshes at Piermont, New York. A field report, J. H. Lehr; The plants of Iona Island. A field report, J. H. Lehr; The Island Pond region as a plant collecting station, J. J. Copeland; Forest ecology in the Harvard Black Rock Forest, B. J. Stout; The major plant communities of Sterling Forest, S. Keatinge; Vegetation of Sterling Forest since the last ice age, J. Nicholas; An introduction to Sterling Forest Gardens, C. A. Lewis.

Curry-Lindahl, Kai. UNE RESSOURCE NATURELLE: LA FAUNE AFRICAINE. [A NATURAL RESOURCE: THE AFRICAN FAUNA.] Publ. Univ. d'Elisabethville 6: 27-42. July 1963. In French. WR 128: 2

[Nordiska Museet & Skansen, Stockholm, Sweden.]

Myres, M. T., editor. OCCASIONAL PAPERS NO. 1. Canadian Soc. Wildl. & Fisheries Biologists. i + 29 p. Oct. 1965. Price 50¢. Send remittance in advance to Dr. M. T. Myres, Univ. Calgary, Calgary, Alberta, Canada. WR 128: 2

Contents: The ecology of snow, W. O. Pruitt; Wildlife management in parks, R. Y. Edwards; Wildland watershed management and wildlife and fishery biology: Some common interests and potential conflicts, W. W. Jeffrey; ARDA and the use of marginal agricultural land, W. A. Benson; The Canadian Council of Resource ministers; An innovation in resources administration, G. R. Francis.

Myres, M. T., editor. OCCASIONAL PAPERS NO. 2. Canadian Soc. Wildl. & Fisheries Biologists. ii + 56 p. June 1967. Price 50¢. Send remittance in advance to Dr. M. T. Myres, Univ. Calgary, Calgary, Alberta, Canada. WR 128: 2

Contents: A role for wildlife in Canada today, W. A. Benson; Resource administration and development in the Northwest Territories, D. R. Flook and others; The biologist's role in fisheries management, C. P. Ruggles; Canada's water resources -- How adequate are they?, C. R. Stanton; The evaluation of two aspects of hatchery stocking in British Columbia, S. B. Smith, T. G. Halsey, and G. E. Stringer; Implications of ARDA to wildlife and fisheries management, W. J. D. Stephen; Operational research and its potential application to biological research and management, C. E. Law.

Ottersen, Signe Ruh, compiler. READINGS ON NATURAL BEAUTY / A SELECTED BIBLIOGRAPHY. USDI Dept. Library Bibliog. no. 1. iii + 94 p. July 1967. WR 128: 2

The references are grouped under subdivisions of these major headings: The environment setting, Planning, Environment pollution, Urban townscape, Landscape architecture and plant materials, Historic preservation, Rural landscape, Outdoor recreation environment, Transportation, and Citizen action. Most of the 1130 references listed appeared after August 1964.

SOILS

Buckner, Russell L. SOIL SURVEY OF BREMER COUNTY, IOWA. SCS. ii + 118 p., 16 figs. + single-fold maps based on aerial photos and bound in. Oct. 1967. Sold by Supt. Documents. WR 128: 2

Jackson, George T., and others. SOIL SURVEY OF WARREN COUNTY, TENNESSEE. SCS. ii + 79 p., 31 figs. + single-fold maps based on aerial photos and bound in. Sept. 1967. Sold by Supt. Documents. WR 128: 2

With a section on managing soils for wildlife and fish.

SOILS--Continued

Lenfesty, Charles D. SOIL SURVEY OF ADAMS COUNTY, WASHINGTON. SCS. ii + 110 p., 9 figs. + single-fold maps based on aerial photos and bound in. Sept. 1967. Sold by Supt. Documents. WR 128: 3

Parker, William B., and others. SOIL SURVEY OF RANDOLPH COUNTY, ALABAMA. SCS. ii + 69 p., 16 figs. + single-fold maps based on aerial photos and bound in. Oct. 1967. Sold by Supt. Documents. WR 128: 3
With a section on the use of the soils for wildlife and fish.

BIBLIOGRAPHIES, DIRECTORIES, BIOGRAPHY, HISTORY

Christensen, Earl M. BIBLIOGRAPHY OF UTAH BOTANY AND WILDLAND CONSERVATION. Brigham Young Univ. Sci. Bull., Biol. Ser. 9(1). i + 136 p. June 1967. WR 128: 3
Includes articles on botany, biotic communities, range management, watershed management, forestry, recreational use of wildlands, and those aspects of zoology and wildlife management involving plant communities or habitat management. Arranged chronologically by author and with a general subject index. References through 1964 are included.

Davis, John. IN MEMORIAM: ALDEN HOLMES MILLER. Auk 84(2): 192-202, 1 pl. Apr. 1967. WR 128: 3
[Univ. Calif., Carmel Valley.] Courtesy/ Paul A. Stewart.

Lindner, K. DIE ANFÄNGE DER DEUTSCHEN JAGDLITERATUR. [THE DEVELOPMENT OF GERMAN HUNTING LITERATURE.] Z. Jagdwissenschaft 10(2): 41-51. June 1964. In German with French and English summ. WR 128: 3
Account of the beginning of German hunting literature in the early fourteenth century.

Madsen, Ruth M., compiler. AGE DETERMINATION OF WILDLIFE / A BIBLIOGRAPHY. USDI Dept. Library Bibliog. no. 2. xi + 111 p. Aug. 1967. WR 128: 3
The arrangement of material is by subject. It is divided into three major categories: Birds, Mammals, and Reptiles and Amphibians. These are subsequently divided following the zoological systematic sequence. Listing of 864 items.

PLANTS--GENERAL, ECOLOGY, TECHNIQUES

Snow, D. W. A POSSIBLE SELECTIVE FACTOR IN THE EVOLUTION OF FRUITING SEASONS IN TROPICAL FORESTS. Oikos 15: 274-281. 1965. [From Auk 84(2), 1967.] WR 128: 3
Fruiting seasons of 19 morphologically and ecologically similar species of Miconia (Melastomaceae) were spread out evenly throughout the year. Fruit produced is important in diet of smaller frugivorous birds such as manakins and tanagers. Staggered fruiting seasons may have evolved through interspecific competition and dispersal of seeds by birds to favorable clearings, may have been important.

WILDLIFE--BIOTAS, ECOLOGY, NATURAL HISTORY

Banks, Richard C. BIRDS AND MAMMALS OF LA LAGUNA, BAJA CALIFORNIA. Trans. San Diego Soc. Nat. Hist. 14(17): 205-232, 4 figs. 18 Aug. 1967. With Spanish summ. WR 128: 3
[US Natl. Museum, Washington, D.C.] Abstract: An annotated list of 69 species of birds and 18 species of mammals known to occur at La Laguna, in the mountains of the Cape region of Baja California, Mexico, presents information on their life histories, with special emphasis on breeding biology. The list

was compiled from recent field work and from examination of literature and earlier collections. Previous work in the area is summarized. Between half and two-thirds of the bird species are known or suspected to breed at La Laguna. Most of the others are migrants or vagrants to the area. Imprecise information does not permit categorization of all species. Fifteen of the 34 birds known to breed there are species or subspecies which breed only in the pinyon-oak forests atop the mountains of the Cape region, and eight others are restricted to southern Baja California. Four mammals are represented by subspecies which are restricted to the forested area of the mountains of the Cape region; two of these have close relatives in the surrounding lowland, but two are far removed from related forms.

Cleland, Charles Edward. THE PREHISTORIC ANIMAL ECOLOGY AND ETHNOZOOLOGY OF THE UPPER GREAT LAKES REGION. Anthropological Paps., Mus. Anthropology, Univ. Mich. no. 29. x + 294 p., 24 maps. 1966. WR 128: 4

The basic data for this study is a series of reports on faunal remains from a number of Upper Great Lakes sites. Each report is a statement of the prehistoric animal ecology of the site area at the time the site was occupied and of the relationship between the culture(s) of the site and its natural environment(s). These site reports are included as appendices. From these and other published sources, a body of data is available which permits conclusions about the changing ecology of the Upper Great Lakes area through time. This information is presented in the section on paleoecology. The description of the ways in which prehistoric cultures of the Upper Great Lakes region utilized available food resources [wildlife] is included in the section entitled ethnozoology. The introduction, paleoecology and ethnozoology comprise roughly one third of the text, but the remainder of the text (the appendices) is a series of readable reports that contain a wealth of information that should be of interest to the wildlifer.

Cox, J. E., R. H. Taylor, and Ruth Mason. MOTUNAU ISLAND CANTERBURY, NEW ZEALAND / AN ECOLOGICAL SURVEY. New Zealand DSIR Bull. 178. 110 p., [50] figs. 1967. Price N.Z. $1.50. WR 128: 4

Includes the following sections: General introduction by J. E. Cox, Geology by J. E. Cox, Soils by J. E. Cox, Mammals and birds, with a note on lizards by R. H. Taylor, and Vegetation by Ruth Mason.

Velizhnin, A. V. [NOTES ON THE FAUNA OF TERRESTRIAL VERTEBRATES OF WRANGELL ISLAND.] Zap. Primorskogo Fil. Geogr. Obshch. SSSR 1(24): 67-78. 1965. [From Biol. Abstr. 48(13), 1967, from Referat. Zhur., Biol., 1966, no. 21625. Transl. of Russian abstr.] WR 128: 4

WILDLIFE--NATURAL AREAS & REFUGES

Curry-Lindahl, Kai. LES PARCS NATIONAUX COMME ARCHIVES DE RECHERCHES ET DOCUMENTATION DE L'ÉVOLUTION DES ESPÈCES. [THE NATIONAL PARKS AS ARCHIVES OF RESEARCH AND THE DOCUMENTATION OF THE EVOLUTION OF THE SPECIES.] Publ. Univ. d'Elisabethville 6: 17-26. July 1963. In French. WR 128: 4

[Nordiska Museet & Skansen, Stockholm, Sweden.]

Curry-Lindahl, Kai. VIER NATIONALPARKS IN SCHWEDISCH-LAPPLAND (SCHWEDEN). [FOUR NATIONAL PARKS IN SWEDISH LAPLAND (SWEDEN).] Geschützte Wildnis. p. 31-61, 16 figs. 1964. In German. WR 128: 4

[Nordiska Museet & Skansen, Stockholm, Sweden.]

WILDLIFE--NATURE PROTECTION & RARE & EXTINCT SPECIES

Erz, Wolfgang. BESONDERS GEFÄHRDETE VOGELARTEN IN NORDRHEIN-WESTFALEN. [PARTICULARLY ENDANGERED SPECIES OF BIRDS IN THE NORTH RHINE-WESTPHALIA STATE.] Ornithol. Mitteil. 19(7): 133-138. July 1967. In German with English summ. WR 128: 5

[Agidiusstrasse 94, Essen-Bredeney, Germany.] The status, distribution, decimating factors, and recommended protective measures for the 20 spp. of birds considered rare or endangered in this westernmost German state are tabulated.

Ferens, B. ANIMAL SPECIES UNDER PROTECTION IN POLAND. Published for the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Scientific Publications Foreign Cooperation Center of the Central Institute for Scientific, Technical and Economic Information (Warsaw, Poland). TT 63-11357. 255 p., 182 figs. 1965. Polish original published by Nature Protection Research Center of the Polish Academy of Sciences, Kraków in 1957. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va. Price $6.00.] WR 128: 5

The present work is intended to be of service to all who wish to familiarize themselves not only with the legal principle of animal protection in Poland but also with the [384] spp. subject to protection, that is the Polish molluscs, insects, fish, amphibians, reptiles, birds and mammals included in the legal act of 4 November 1952. The geographical distribution, biology and habits of the species affected by the act are included.

Smith, F. R., and Rarities Committee. REPORT ON RARE BIRDS IN GREAT BRITAIN IN 1966. British Birds 60(8): 309-338, 4 pls. Aug. 1967. WR 128: 5

Systematic list of 1966 records accepted.

WILDLIFE--MORPHOLOGY, PHYSIOLOGY, BEHAVIOR, MIGRATION

Michael, Edwin D. BEHAVIORAL INTERACTIONS OF BIRDS AND WHITE-TAILED DEER. Condor 69(4): 431-432. July-Aug. 1967. WR 128: 5

[Stephen F. Austin State Coll., Nacogdoches, Texas.] Relations among deer and most birds were neutral or beneficial to associating species. Roadrunners (Geococcyx californianus), turkeys (Meleagris gallopavo) and vultures (Coragyps atratus and Cathartes aura) all benefit from presence of deer. Turkeys and deer warn each other of approaching danger; roadrunners feed on insects flushed by deer; vultures feed on dead deer, and deer may benefit by removal of its dead.--Courtesy/ Paul A. Stewart.

WILDLIFE--EFFECTS OF CHEMICALS, WEATHER, CARS, ETC.

Bagley, George E., and Louis N. Locke. THE OCCURRENCE OF LEAD IN TISSUES OF WILD BIRDS. Bull. Environmental Contamination & Toxicol. 2(5): 297-305. Sept.-Oct. 1967. WR 128: 5

[Patuxent Wildl. Res. Center, Laurel, Md.] Concentrations of lead found in the liver and tibia of selected species of birds are tabulated.

Black, C. T., and G. L. Zorb. EFFECT ON BIRDS OF FIELD APPLICATION OF MALATHION TO CONTROL THE CEREAL LEAF BEETLE, 1963 AND 1964. Mich. Dept. Conserv., Res. & Development Rept. no. 108. 7 p. 1966. WR 128: 5

Conclusion: No evidence was found that malathion sprayed from the air in May at rates of 1 lb. per acre in water solution, or 0.4 to 0.6 lb. per acre undiluted, ultra low volume, was detrimental to birdlife. It is to be hoped that this short-lived insecticide may be used in the place of more toxic, persistent insecticides commonly used. Only by such changes in agricultural practice can birds be spared the burden of chemical poisoning, its attendant effects on health and reproduction, and even death.

Bruns, Herbert. GROSSE VOGELVERLUSTE DURCH MISSBRAUCH CHEMISCHER PFLANZENSCHUTZMITTEL (PESTIZIDE). [HIGH BIRD MORTALITIES THROUGH THE MISUSE OF PESTICIDES.] Ornithol. Mitteil. 18(10): 203-205, 1 fig. Oct. 1966. In German. WR 128: 6

[Postfach 169, Wiesbaden, Germany.] Review of work in Netherlands and United States.

Butcher, A. Dunbavin. THE EFFECT ON FAUNA OF POISONS USED IN VERMIN CONTROL. Victoria Fisheries & Wildl. Dept., Wildl. Contribution no. 5. 15 p. 1964. WR 128: 6

Butcher, A. Dunbavin. WILDLIFE HAZARDS FROM THE USE OF PESTICIDES. Australasian J. Pharmacy 1965: 105-109. 30 Nov. 1965. WR 128: 6

Summary: There have been kills of wildlife (including fish) following the use of pesticides. Pesticide residues are widespread in wildlife. There is circumstantial evidence of the atmospheric transfer of pesticides. There is evidence of contamination of the aquatic environment by pesticides. There is evidence of the contamination of the soil by pesticides. The biological implications of environmental contamination by pesticides and the presence of pesticide residues in wildlife are by no means determined. It is submitted that it is not unreasonable to assume that they have the same significance as that demonstrated overseas: Diminished reproductive capacity; Non-viability of eggs and offspring; Retardation of growth; Loss of vigour; The combined effect of these influences on the populations of individual species and on the ecosystem. There is reason for concern as to the effect of contamination of the marine environment by pesticides on the resources of the oceans.

de Crombrugghe, S. A. VERGLEICH EINIGER AMERIKANISCHER WILDSCHADEN-VERHÜTUNGSMITTEL MIT DEUTSCHEN PRÄPARATEN. [COMPARISONS OF SOME AMERICAN WILDLIFE REPELLENTS WITH GERMAN PREPARATIONS.] Z. Jagdwissenschaft 10(2): 62-68. June 1964. In German with French and English summ. WR 128: 6

Seven American wildlife repellents and 9 German wildlife repellents were tested using caged red deer, fallow deer, roe deer, mufflon and rabbits as the experimental animals. Ridz, Cuprinol, Diamond HLN, Arasan 42-S, Tat-go, Ringwood and Z.I.P. were the American repellents used.

Fay, L. D., and W. G. Youatt. RESIDUES OF CHLORINATED HYDROCARBON INSECTICIDES IN LOONS, GREBES, A GULL, AND A SAMPLE OF ALEWIVES FROM LAKE MICHIGAN. Mich. Dept. Conserv., Res. & Development Rept. no. 109. 7 p., mimeo. 18 Apr. 1967. WR 128: 6

[Rose Lake Wildl. Res. Center, East Lansing, Mich.] Conclusion: DDT residues were found in the breast muscle and brain of loons, grebes, a ring-billed gull, and a sample of alewives from Lake Michigan. Aldrin occurred rather frequently, heptachlor infrequently in breast muscle from loons. Methoxychlor was found in the brain of one loon. Endrin in addition to DDT residues occurred in the single alewife sample analyzed. Chlorinated hydrocarbon insecticide levels were low in the tissue samples and these materials appear not to be the direct cause of death of the birds. While insidious physiologic effects might be ascribed to low tissue levels of pesticides, it would hardly appear that this was an important factor in the bird die-offs in Lake Michigan. Field and laboratory studies indicated the birds died quickly from an acute illness.

Gough, Bobby J., Larry A. Escuriex, and Thomas E. Shellenberger. A COMPARATIVE TOXICOLOGIC STUDY OF A PHOSPHORODITHIOATE IN JAPANESE AND BOBWHITE QUAIL. Toxicol. & Appl. Pharmacol. 11(1): 12-19, 1 fig. July 1967. WR 128: 6

[Gulf South Res. Inst., New Iberia, La.] Summary: Guthion had a significant effect on growth of female but not male Japanese quail at a dietary level of 540 ppm; with bobwhite, growth was significantly reduced at 20 ppm. All birds of both species died during the first 10 days of feeding at 1620 ppm. With bobwhite, 80% mortality was obtained at 540 ppm and 30% at 180 ppm whereas there was no increase above normal in mortality of Japanese quail at 180 ppm

or 540 ppm. Egg production of Jananese quail was delayed and markedly reduced at 540 ppm; total egg hatchability at 180 and 540 ppm was somewhat lower than obtained in the control birds. Whole blood or brain cholinesterase of both species was inhibited after 4 and 10 weeks at 60 ppm; there was somewhat greater inhibition in bobwhite. Results indicate that bobwhite quail were more sensitive to Guthion than Japanese quail.

Hanson, W. C. RADIOECOLOGICAL CONCENTRATION PROCESSES CHARACTERIZING ARCTIC ECOSYSTEMS. Radioecological Concentration Processes (Proc. Internat. Symposium held in Stockholm 22-29 Apr. 1966). p. 183-191, 4 figs. [1966.] WR 128: 7
[Battelle Memorial Inst., Richland, Wash.] "In summary, the lichen-reindeer (caribou)-man food chain has been observed to constitute the most important concentration process for fallout radionuclides in arctic regions. The higher levels of most radionuclides, especially ^{90}Sr and ^{137}Cs, within this system results from (1) the tendency for lichens to absorb and retain fallout material, (2) the utilization of lichens for food, especially in winter, by reindeer and caribou, and (3) the dependence upon reindeer and caribou for food by certain northern populations. Although there are differences in radionuclide concentrations in plants and animals, including man, from various locations within the arctic region, the same general ecological processes have been found to efficiently transfer significant amounts of radionuclides. Differences in radionuclide behavior within arctic ecosystems have resulted from the important effects of climatic factors, animal behavior, food habits, physiological parameters and human cultural practices. Cesium-137 has proved to be the most important fallout radionuclide from the standpoint of rates, routes and amounts cycled within arctic ecosystems; and a most useful tool for radioecological research."

Hanson, W. C., D. G. Watson, and R. W. Perkins. CONCENTRATION AND RETENTION OF FALLOUT RADIONUCLIDES IN ALASKAN ARCTIC ECOSYSTEMS. Radioecological Concentration Processes (Proc. Internat. Symposium held in Stockholm 22-29 Apr. 1966). p. 233-245. [1966.] WR 128: 7
[Battelle Memorial Inst., Richland, Wash.] Results are reported for three main subjects: (1) measurements of fallout radionuclides in various ecosystem components by multidimensional and conventional gamma-ray spectrometry and ^{90}Sr analysis, particularly the important trophic levels of the lichen-caribou-man food web; (2) retention of ^{85}Sr and ^{134}Cs applied to natural lichen communities; and (3) preliminary data from a study of half-time of ^{137}Cs body burdens of Anaktuvuk Pass residents removed from their normal diet of caribou meat.--From summ. and concl.

Locke, L. N., and G. E. Bagley. LEAD POISONING IN A BLACK DUCK. Bull. Wildl. Disease Assoc. 3: 37. Jan. 1967. WR 128: 7
[Patuxent Wildl. Res. Center, Laurel, Md.]

Rettig, Klaus. TIERVERLUSTE AUF AUTOSTRASSEN. [HIGHWAY MORTALITIES.] Ornithol. Mitteil. 17(11): 233-234. Nov. 1965. In German. WR 128: 7
[Wiesenstrasse 4, Langenhagen, Germany.] Monthly totals of reptile and amphibian, bird and mammal losses are tabulated.

Siegfried, W. R. A SURVEY OF WILDLIFE MORTALITY ON ROADS IN THE CAPE PROVINCE. Cape of Good Hope, Dept. Nat. Conserv. Investigations Rept. no. 6. p. 1-20, 2 figs. 1965. In English with Afrikaans summ. WR 128: 7
Mammal, bird, and reptile road casualties recorded during 1962-64 for different regions of the province are analyzed.

Tietjen, Howard P., Curtis H. Halvorson, Paul L. Hegdal, and Ancel M. Johnson. 2,4-D HERBICIDE, VEGETATION, AND POCKET GOPHER RELATIONSHIPS BLACK MESA, COLORADO. Ecology 48(4): 634-643, 5 figs. Summer 1967. WR 128: 8

[U.S. Fish & Wildl. Serv., Denver, Colo.] Abstract: In a 7-year study on Black Mesa, Colorado, elevation 10,000 ft 2,4-D herbicide treatment initially reduced forb abundance and northern pocket gopher (Thomomys talpoides) populations 80% to 90%. Both forbs and pocket gophers remained at low levels on one area but returned to pretreatment levels on the other area. The decline in pocket gopher numbers was caused by an inability to survive where their preferred food (forbs) was eliminated by herbicide treatment. The decline was not caused by movements of the animals from sprayed areas, or by direct or indirect toxicity of 2,4-D. The common grasses offer, at best, only a marginal diet for northern pocket gophers; only succulent grasses or those bearing corms or rhizomes yield a subsistence diet. Limited sampling did not indicate that the spray treatment affected the numbers of other small mammals.--Courtesy/ Paul A. Stewart.

Ueckermann, E. ERHEBUNG ÜBER DIE WILDVERLUSTE DURCH DEN STRASSENVERKEHR UND DIE VERKEHRSUNFÄLLE DURCH WILD. [A SURVEY OF GAME LOSSES FROM HIGHWAY TRAFFIC AND HIGHWAY ACCIDENTS CAUSED BY GAME.] Z. Jagdwissenschaft 10(4): 142-168, 24 figs. Dec. 1964. In German with English and French summ. WR 128: 8

A rough estimate of yearly losses for roe deer, red deer, fallow deer, mufflons, wild boar, and hares results in a percentage of the yearly shooting results of about 1 and 16%. According to this calculation about 40,000 roe deer and 120,000 hares are run over in one year. The number of accidents differs according to the kind of game concerned. With roe deer only about 17% of animals run over caused accidents. The highest percentage showed red deer with 43.4%.--From summ.

Zorb, Gordon L., and William R. Fouch. TOXICITY OF THE ORGANO-PHOSPHATES MALATHION, GUTHION AND DIAZINON TO PENNED PHEASANTS. Mich. Dept. Conserv., Res. & Development Rept. no. 86. 5 p., mimeo. Nov. 1966. WR 128: 8

Abstract: The organo-phosphates malathion and guthion caused no apparent harm to pheasants. Large pens containing a cock and five hens were sprayed with these chemicals at the rates of 1, 5, and 10 lb. per acre. No birds died, none were noticeably sick, and the reproductive success of the sprayed birds was the same as the control birds the following spring. Diazinon at the rate of 1 lb. per acre had no effect on the pheasants or on their reproductive success. However, diazinon applied to the pens at the rate of 5 lb. per acre for five applications, two weeks apart, killed 40% (17 out of 42) of the birds. About half of the birds observed suffered from each of the five applications and some remained essentially immobile for periods of up to five days following the spray. When the application rate of diazinon was cut to 3 lb. per acre we lost two birds (2 out of 30) after two applications and about one-quarter of the birds became ill after each spray. The reproductive success of the birds exposed to 5 lb. of diazinon did not differ from that of the controls.

Zorb, Gordon L., William G. Youatt, and L. D. Fay. RESIDUES OF CHLORINATED HYDROCARBON INSECTICIDES IN PHEASANTS FROM TWO AREAS OF MICHIGAN. Mich. Dept. Conserv., Res. & Development Rept. no. 111. 17 p., mimeo. Apr. 1967. WR 128: 8

[Rose Lake Wildl. Res. Area, East Lansing, Mich.]

WILDLIFE--PARASITES & DISEASES

Friend, Milton. "THE RAGE" HITS WILDLIFE. [N.Y.] Conservationist 21(5): 29-31, 36-37, illus. Apr.-May 1967. WR 128: 8

"Through the years rabies has been a continuous disease problem in the State. This problem has varied in intensity from year to year (1,175 cases in 1946, 89 cases in 1963) and has shifted from one area to another. The problem has

also changed from one involving a domestic vector, the dog, to that involving a number of wildlife species. Control efforts are now being directed at the fox and skunk and will include the bat if the need arises."

WILDLIFE--POPULATIONS & FLUCTUATIONS

Drozdov, N. N. [THE COMBINED ANALYSIS OF FAUNA AND ANIMAL POPULATION.] Vestnik Moskov Univ. Geogr. 2: 50-55. 1965. [From Biol. Abstr. 48(16), 1967, from Referat. Zhur., Biol., 1966, no. 21617. Transl. of Russian abstr.] WR 128: 9

Yurgenson, P. B. [AGE STRUCTURE OF POPULATIONS AND THE DYNAMICS OF FERTILITY IN GAME.] Zool. Zhur. 45(2): 161-171. 1966. [From Biol. Abstr. 48 (12), 1967. In Russian with English summ.] WR 128: 9

The study of the age variability of reproduction performance of about 20 species of game mammals and birds shows that a lower fecundity of young females and a high percentage of those that do not participate in the breeding process are a regular phenomenon. A rise of the abundance of a population as a result of one or several years with favorable environmental conditions causes an increase in the per cent of females of younger age classes in this population. Due to this when a population attains the highest level of abundance its further increase is arrested and a decline begins. This plays the role of a "brake" stopping the sustained increase of the population density. Therefore, changes in the age structure are of great importance in the life of the population and determine the impossibility of an infinite increase in the population density.

WILDLIFE--BIOMETRICS

Tepper, Ester E., compiler. STATISTICAL METHODS IN USING MARK-RECAPTURE DATA FOR POPULATION ESTIMATION. USDI Dept. Library Bibliog. no. 4. ii + 65 p. Nov. 1967. WR 128: 9

Preface: Although the statistical analysis of mark-recapture data yields information about many facets of an animal population, this bibliography presents, in part, the literature on population estimation only, using mark-recapture data. Field studies have been, for the most part, selected to illustrate statistical treatment of the data. [Classified listing of 288 references.]

WILDLIFE--TECHNIQUES

Herrington, Roscoe B., and S. Ross Tocher. AERIAL PHOTO TECHNIQUES FOR A RECREATION INVENTORY OF MOUNTAIN LAKES AND STREAMS. US Forest Serv. Res. Pap. INT-37. 21 p., 5 figs. 1967. WR 128: 9

[Intermountain Forest & Range Expt. Sta., Ogden, Utah.] Abstract: Describes results of aerial photo techniques tested in Utah to measure the characteristics of mountain lakes and streams. Compares accuracy of photo determination of lake depth with field measurements of lake depth. Procedures for all photo measurements needed to conduct lake and stream inventory are explained.

Priklonskii, S. G. [COEFFICIENTS TO TREAT THE DATA OF WINTER TRANSECT METHOD OF CENSUS TAKING OF GAME ANIMALS BY THEIR TRACKS.] Bull. Moscow Obshch. Ispit. Prirody (Biol.) 70(6): 5-12, illus. 1965. [From Biol. Abstr. 48(15), 1967. In Russian with English summ.] WR 128: 9

The transect method of census taking of forest game animals by their traces on the snow with the application of the Formozov's formula, and the transition from relative to absolute data with its aid is analyzed. On the basis of many data obtained the value of calculation coefficient depends only upon the distance covered by the animal during 24 hr., this value being reversely proportional to the distance covered. As the first possible variant of the calculation coefficient formula the following is suggested: $K = 1.57/L$.

WILDLIFE--MANAGEMENT & RESEARCH, GENERAL

Dirschl, H. J., and A. S. Goodman. LAND CAPABILITY FOR WILDLIFE PRODUCTION AND UTILIZATION IN THE WESTERN SASKATCHEWAN RIVER DELTA. Canadian Wildl. Serv. and Saskatchewan Wildl. Branch. xx + 234 p., 29 figs. + 4 supplementary large, folded colored maps. 12 May 1967. WR 128: 10

A report of the 1,600-square-mile area, the current utilization of its wildlife resource and an evaluation of its waterfowl, muskrat and moose use capability. A proposed management plan is developed. To supplement this basic report, Part B (p. 57-234) contains detailed reports on individual aspects of the study. The vegetation, waterfowl capability use, muskrat habitat capability, and moose habitat capability are mapped.

Kuznetsov, B. [WILDLIFE MANAGEMENT IN MONGOLIA.] Okhota & Okhotnich'e Khoz. 1965(7): 42-43. 1965. [From Biol. Abstr. 48(13), 1967, from Referat. Zhur., Biol., 1966, no. 11577. Transl. of Russian abstr.] WR 128: 10

New Mexico. NEW MEXICO WILDLIFE MANAGEMENT. N. Mex. Dept. Game & Fish. xiv + 250 p., illus. 1967. Available at $2.00 from New Mexico Dept. Game & Fish, Santa Fe. WR 128: 10

In addition to sections on each species of game bird and game mammal in which the history, status, life sketch, management, and outlook for the future are given, there are sections entitled: Wildlife and environment; land utilization and wildlife; game census and harvest data; tools and game management; wildlife, the people and the state; and ways, means, and end results.

Nüsslein, F. JAGDBETRIEBLICHE FOLGERUNGEN AUS DEM VERHÄLTNIS ZWISCHEN DER GRÖSSE DER JAGDBEZIRKE UND DEM WOHNRAUM EINIGER JAGDBARER TIERE. [GAME MANAGEMENT CONCLUSIONS ON THE RELATIONSHIP BETWEEN THE SIZE OF THE HUNTING RESERVE AND THE HOME RANGE OF SOME GAME ANIMALS.] Z. Jagdwissenschaft 10(1): 2-8. Mar. 1964. In German with French and English summ. WR 128: 10

[Univ. Göttingen, Münden, Germany.]

Savory, C. R. THE UTILISATION OF WILDLIFE ON RHODESIAN MARGINAL LANDS AND ITS RELATIONSHIP TO HUMANS, THEIR DOMESTIC STOCK AND LAND DETERIORATION (DROUGHT). Proc. First Rhodesian Sci. Congress Bulawayo 16-20 May 1967. p. 75. 1967. WR 128: 10

[P.O. Box 3294, Bulawayo, Rhodesia.] Abstract only.

Zorb, Gordon. SHRUBS FOR WILDLIFE HABITAT IMPROVEMENT IN SOUTHERN MICHIGAN. Mich. Dept. Conserv., Res. & Development Rept. no. 81. 14 p., mimeo. July 1966. WR 128: 10

Autumn olive, multiflora rose, Siberian crab, gray dogwood, and buffalo berry were rated highest among 21 spp. considered by game biologists and game area managers in Mich.

WILDLIFE--HUNTING AREAS & PROBLEMS

Besadny, C. D. AN EVALUATION OF WISCONSIN'S LICENSED SHOOTING PRESERVE PROGRAM. Wis. Conserv. Dept. Res. Rept. no. 24. iii + 21 p. July 1967. WR 128: 10

An evaluation was carried on in 1964 and 1965 to determine the location and extent of the pheasant harvest on shooting preserves under recent regulation changes which further liberalized hunting opportunities. Three recommendations are made to protect native pheasant populations without seriously compromising growth of the shooting preserve program: (1) Develop a shooting preserve policy stating the official position of the Department which would allow regulated growth of the program according to planned objectives. This policy would be implemented by guidelines which game managers could use in reviewing applications for new preserves; (2) Divide the state into two management zones with specific regulations and criteria for establishing preserves to fulfill the needs of both pheasants and hunters; and (3) Promote private game management on preserves with technical assistance and cost-sharing for wildlife practices provided by various state and federal agencies.--From abstr.

WILDLIFE--HUNTING AREAS & PROBLEMS--Continued

Hager, J., and M. Berger. ENTWICKLUNG DER JAGDPACHTPREISE IN BUND UND LÄNDERN. [DEVELOPMENT OF HUNTING LEASE RIGHTS IN THE FEDERAL REPUBLIC AND ITS STATES.] Z. Jagdwissenschaft 9(4): 138-145, 3 figs. Dec. 1963. In German with French and English summ. WR 128: 11

WILDLIFE--PREDATION, CROP DAMAGE, CONTROL

Gessel, Stanley P., and Gordon H. Orians. RODENT DAMAGE TO FERTILIZED PACIFIC SILVER FIR IN WESTERN WASHINGTON. Ecology 48(4): 694-697. Summer 1967. WR 128: 11

[Univ. Wash., Seattle.] Abstract: Terminal shoots and buds of Pacific silver fir (Abies amabilis [Doug.] Forbes) which had responded to nitrogen fertilization were significantly damaged by rodents during the winter of 1960-61 in contrast to adjacent unfertilized trees. Small mammal trapping studies in the area the following summer showed no general rodent population increase. We believe that changes in the feeding behavior of small rodents did occur as a result of the fertilizer treatment and a 20% increase in nitrogen and protein content of silver fir vegetative tissue. We also postulate that Clethrionomys was the rodent responsible for the selective use.--Courtesy/ Paul A. Stewart.

WETLANDS & WILDLIFE

Evans, Keith E., and Roger R. Kerbs. WATERFOWL AND SHOREBIRD USE ON SELECTED STOCK PONDS IN JACKSON COUNTY: 1966. S. Dak. Bird Notes 19(2): 28-30. June 1967. WR 128: 11

[Rocky Mountain Forest & Range Expt. Sta., Rapid City, S. Dak.] Summary: Twenty-eight species of waterfowl and shorebirds totaling 1862 individuals, were observed on 13 ponds between April 1 and October 25, 1966. These ponds supported an average of 10 birds per pond for approximately 214 days during 1966. In addition, 30 species of other birds were seen in the area.

RANGELAND & WILDLIFE

Kuvaev, V. B. POSSIBILITIES FOR RATIONALIZED USE OF THE VERKHOYANSK DEER PASTURES. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51230. 11 p. 1967. Russian original from Problemy Severa no. 8. p. 280-289. 1964. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 11

Makhaeva, L. V. THE GRAZING AREA REQUIRED FOR DEER. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51231. 8 p. 1967. Russian original from Trudy Nauchn.-Issled. Inst. Sel'skogo Khozyaistva Krainego Severa 11: 41-50. 1963. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 11

Norberg, Elmer R. BRUSH = DEER + ELK. Idaho Wildl. Rev. 20(1): 12-15, illus. July-Aug. 1967. WR 128: 11

A popular account of plant and animal succession in relation to Idaho conditions.

Vakhtina, T. V. THE YIELD OF LEAVES OF SOME FODDER SHRUBS IN THE TUNDRA AND THEIR UTILIZATION FOR DEER BREEDING. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51232. 8 p. 1967. Russian original from Problemy Severa no. 8. p. 290-296. 1964. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 12

Summary: The advantage of shrub feeds over other groups of green fodders is that they are widely distributed on pastures of all zones, they grow on large tracts in groups, and the deer obtain food of high nutritional value without wasting time and energy. The basic reserve of shrub leaves forms in the willows Salix lanata and S. phylicifolia during the first five or six days and in S. glauca during the first ten days. The accelerated development of leaves proves that the plants in the Far North have adapted themselves to the brief growing season with round-the-clock illumination. Most willingly eaten are the leaves of S. phylicifolia, then S. lanata, Betula nana, and S. glauca. The edibility of shrub leaves drops after the shoots are completely covered by foliage and the leaf blade is fully developed. The utilization of shrub thickets depends on their density. Maximum grazing of willow thickets occurs at a density of 50-60%; sparser thickets are less utilized, and in denser thickets the leaves are eaten only at the thicket margins. From the moment the leaf blade is fully developed, the leaf reserve of shrubs becomes almost constant for each type of pasture. Throughout the growing season the shrub thickets can be browsed several times, but must not exceed 25-30% of the total leaf. When arranging seasonal pastures it should not be forgotten that areas with a preponderance of S. lanata are suitable for early-spring pastures and those with Betula nana for late-fall and early-summer pastures; summer pastures must contain a variety of fodder-shrub species.

FORESTLAND--MANAGEMENT FOR & DAMAGE BY WILDLIFE

Lawrence, William H. THE JOB AHEAD IN FOREST-WILDLIFE MANAGEMENT RESEARCH. Reprint from Proc. 1964 Ann. Meeting Western Forest Pest Committee. 4 p., 1 fig. 1964. WR 128: 12

"In conclusion, successful management of wildlife in a managed forest requires that we first obtain the necessary biological facts then put these to work within the framework of land use defined primarily by the major use with the full understanding and support of the public."

Storm, G. L., and C. H. Halvorson. EFFECT OF INJURY BY PORCUPINES ON RADIAL GROWTH OF PONDEROSA PINE. J. Forestry 65(10): 740-743, 4 figs. Oct. 1967. WR 128: 12

[Ill. Nat. Hist. Surv., Urbana.] Abstract: Radial growth was reduced in ponderosa pines (Pinus ponderosa Laws.) growing in a plantation and injured by porcupines (Erethizon dorsatum L.). The most significant reduction in radial growth occurred in completely girdled trees. Reductions in radial growth in scarred trees were most pronounced during the first and second years after scarring, but the mean difference in radial growth between scarred and unscarred trees was not significant the fifth year after scarring.

Szczerbiński, Wiesław. THE PROBLEM OF STANDS WITH BARK STRIPPED OFF BY GAME ANIMALS AND CONSIDERATION OF METHODS SUITABLE FOR STUDYING THE EFFECTS OF DAMAGE IN PINE AND SPRUCE STANDS. Published for the U.S. Department of Agriculture and the National Science Foundation, Washington, D.C., by the Scientific Publications Foreign Cooperation Center of the Central Institute for Scientific, Technical and Economic Information (Warsaw, Poland). TT 65-50329. 17 p. 1966. Polish original from Sylwan 103(5): 73-90. 1959. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va. Price $1.00.] WR 128: 12

MAMMALS--GENERAL

Bouvier, G. MITTLERE ORGANGEWICHTE BEIM WILD. [AVERAGE WEIGHTS OF ORGANS OF GAME.] Z. Jagdwissenschaft 9(1): 1-6. Mar. 1963. In German with French and English summ. WR 128: 13

Average weights of the most important organs of ibex, red deer, roe, chamois, hare, and badger are compared.

Rakov, N. V. [CHARACTERISTICS OF CO-EXISTENCE OF THE BOAR, BROWN BEAR AND BARIBAL BEAR IN AMURO-USSURIAN TERRITORY.] Zool. Zhur. 45(4): 617-618. 1966. [From Biol. Abstr. 48(15), 1967. In Russian with English summ.] WR 128: 13

In the zones of Manchurian and transitional forests of the Amur Territory the wild boar, brown bear and baribal bear are feeding on similar food. In off-years with respect to acorns and cedar cones the brown bear intensely preys on wild boars. On the basis of the concurrence for food brown bears sometimes destroy baribal bears. No cases of baribal bears attacking wild boars and other ungulates are known. One of the migrations of brown bears and baribal bears that occurred in July to Dec. of 1960 is described.

Rosenzweig, Michael Leo. PRODUCTIVITY, COMMUNITY STRUCTURE AND THE STRATEGY OF BODY SIZE IN NORTH AMERICAN CARNIVORA. Ph.D. thesis, Univ. Pa. 98 p. 1966. [From Dissertation Abstr. 27(12B), 1967.] WR 128: 13

Stubbe, Michael. ZUR BIOLOGIE DER RAUBTIERE EINES ABGESCHLOSSENEN WALD-GEBIETES. [ON THE BIOLOGY OF THE PREDATORS OF AN ISOLATED WOODLANDS.] Z. Jagdwissenschaft 11(2): 73-102, 17 figs. June 1965. In German with French and English summ. WR 128: 13

Vulpes vulpes, Meles meles, Martes martes, and Martes foina were studied during one year on an isolated woodland of 1300 hectares.

Sysoev, N. D. [LYNX AND STEPPE POLECAT IN THE VLADIMIR DISTRICTS.] Zool. Zhur. 45(8): 1269-1270. 1966. [From Biol. Abstr. 48(15), 1967. In Russian with English summ.] WR 128: 13

MAMMALS--TECHNIQUES

Boswall, Jeffery. A DISCOGRAPHY OF PALEARCTIC MAMMAL SOUND RECORDINGS. Recorded Sound (J. British Inst. Recorded Sound) 22-23: 88-89. Apr.-July 1966. WR 128: 13

[British Broadcasting Corp., Bristol, England.]

MAMMALS--FAUNAS & MANUALS

Clark, T. W. MAMMALS OF BOILING SPRINGS STATE PARK, WOODWARD COUNTY, OKLAHOMA. Proc. Okla. Acad. Sci. 46: 36-38. 1966. [From Biol. Abstr. 48 (13), 1967.] WR 128: 13

[Okla. State Univ., Stillwater.]

Corbet, G. B. THE IDENTIFICATION OF BRITISH MAMMALS. Trustees British Museum (Nat. Hist.). iii + 46 p., 19 figs. 1964. Price 4 shillings. WR 128: 13

List and key to 95 spp. of mammals that have been recorded in a wild state in the British Isles or their coastal waters.

Kuz'mina, I. E. [HISTORY OF THE THERIOFAUNA OF THE NORTHERN URALS AND THE URAL REGION IN THE UPPER ANTHROPOGEN.] Bull. Moscow Obshch. Ispit. Prirody (Biol.) 71(3): 91-102, illus. 1966. [From Biol. Abstr. 48(16), 1967. In Russian.] WR 128: 13

MAMMALS--POPULATIONS, HOME RANGES, COMMUNITIES

Sulkava, Seppo, and Pertti Sulkava. ON THE SMALL-MAMMAL FAUNA OF SOUTHERN OSTROBOTHNIA. Aquila Ser. Zool. 5: 18-29, 1 fig. 1967. WR 128: 14
[Univ. Oulu, Oulu, Finland.] Quantitative accounts of insectivores, voles, rats and flying squirrel during 1949-1965.

MAMMALS--PARASITES & DISEASES

Condy, J. B. FOOT AND MOUTH DISEASE IN RHODESIAN WILDLIFE. Proc. First Rhodesian Sci. Congress Bulawayo 16-20 May 1967. p. 13. 1967. WR 128: 14
[Veterinary Res. Lab., P.O. Box 8101, Causeway, Salisbury, Rhodesia.] Abstract only.

Willis, Finley, Jr. RABIES IN WILDLIFE: "ALARMING INCREASE NOTED IN KENTUCKY." Ky. Happy Hunting Ground 23(5): 2-3, illus. Sept. 1967. WR 128: 14
"Foxes carrying rabies virus totaled 75 during the first half of 1967--20 more cases than confirmed during all of 1966. Dogs accounted for 24 rabid animals this year, while 18 head of cattle contracted the disease. Skunks added eight to the total and six cats were found to have rabies. A horse, rodent, bat, and raccoon each were confirmed as rabid during the first six months of this year."

SHREWS, MOLES, BATS

Church, Ronald L. CAPTURE OF A HOARY BAT, LASIURUS CINEREUS, BY A SPARROW HAWK. Condor 69(4): 426. July-Aug. 1967. WR 128: 14
[Univ. Nev., Reno.] The bat, still alive, was dropped to the ground and not eaten by the sparrow hawk (Falco sparverius).--Courtesy/ Paul A. Stewart.

De Castellarnau, Ignacio Sala. BIONOMIA DE LOS SORICIDOS. LAS MUSARAÑAS IBÉRICAS. [BIONOMICS OF THE SORICIDAE (INSECTIVORA) (MAMMALIA). THE IBERIAN SHREWS.] Broteria 35(1/2): 109-120, illus. 1966. [From Biol. Abstr. 48(15), 1967. In Spanish.] WR 128: 14

Hanak, Vladimir, and Jiri Gaisler. DIE TEICHFLEDERMAUS (MYOTIS DASYCNEME BOIE, 1825) IN DER TSCHECHOSLOWAKEI UND ANMERKUNGEN UBER DIE VERBREITUNG IN EUROPA. [MYOTIS DASYCNEME BOIE 1825 IN CZECHOSLOVAKIA AND ITS DISTRIBUTION IN EUROPE.] Zool. Listy 14(2): 117-128. 1965. [From Biol. Abstr. 48(4), 1967. In German with Czech summ.] WR 128: 14

Herreid, Clyde F., II. MORTALITY STATISTICS OF YOUNG BATS. Ecology 48(2): 310-312, 1 fig. Early Spring 1967. WR 128: 14
[Duke Univ., Durham, N.C.] Abstract: Young free-tailed bats, Tadarida brasiliensis mexicana, fall to the floor of nursery caves where they are eaten by beetles and predators. The number of young falling is correlated with the number of young in the cave and the bat's age. During the first two months of life there is a loss of 1.3% of the population. This mortality is lower than for the adults over a comparable period.--Courtesy/ Paul A. Stewart.

Hyvärinen, Heikki. VARIATION OF THE SIZE AND CELL TYPES OF THE ANTERIOR LOBE OF THE PITUITARY DURING THE LIFE CYCLE OF THE COMMON SHREW (SOREX ARANEUS L.). Aquila Ser. Zool. 5: 35-40, 4 figs. 1967. WR 128: 14
[Univ. Oulu, Oulu, Finland.]

Khajuria, H. ON THE GENUS SCOTOZOUS DOBSON (CHIROPTERA: VESPERTILIONIDAE) (TAXONOMIC STATUS). Curr. Sci. 34(22): 640-641, illus. 1965. [From Biol. Abstr. 48(13), 1967.] WR 128: 14
[Cent. Reg. Sta., Zool. Serv. India, Jabalpur, India.]

Koopman, Karl F., and Finnur Gudmundsson. BATS IN ICELAND. Am. Museum Novitates 2262: 1-6. 1966. [From Biol. Abstr. 48(15), 1967.] WR 128: 15
[Am. Museum Nat. Hist., New York, N.Y.] Myotis lucifugus and Lasiurus cinereus are recorded from Iceland. Ideas are suggested as to their arrival, as it seems certain that there is no resident bat population in Iceland.

Myrcha, A. COMPARATIVE STUDIES ON THE MORPHOLOGY OF THE STOMACH IN THE INSECTIVORA. Acta Theriol. 12(14): 223-244, 8 figs. 1967. With Polish summ. WR 128: 15
[Mammals Res. Inst., Polish Acad. Sci., Białowieża, Poland.]

Tamsitt, J. R., and Darío Valdivieso. REPRODUCTION OF THE FEMALE BIG FRUIT-EATING BAT, ARTIBEUS LITURATUS PALMARUM, IN COLOMBIA. Caribbean J. Sci. 5 (3&4): 157-166. Sept.-Dec. 1965. In English with Spanish summ. WR 128: 15
[School of Tropical Med., San Juan, Puerto Rico.] Abstract: Reproductive activity of the female big fruit-eating bat, Artibeus lituratus palmarum, was investigated in west central Colombia for a 19 month period during 1960-1963. The young are born at any time of the year, and parturition takes place in the normal resting position with the head downward. The litter size is one, and there is only one embryo or placental site in a uterus. Embryo resorption was not seen, and the number of young is limited by reducing the number of ova shed. At birth the young is covered with fine gray hair, the eyes are open, recurved teeth are established, and movements are directed. Volants individual consist of mature and immature females, and ovarian development and the attainment of adult pelage or body size are not absolutely correlated, although a minimum weight of 46 g has to be reached before reproduction can occur. In equatorial Colombia climatic conditions tend to be uniform throughout the year, temperatures fluctuate little, and there is a continuous food supply. Continuous breeding in A. lituratus, in which successive breeding periods of individuals are contiguous, allows for the exploitation of an environment in which great frequency in breeding is practicable.

RABBITS & PIKAS

Black, Hugh Clark. AN ANALYSIS OF A POPULATION OF SNOWSHOE HARES, LEPUS AMERICANUS WASHINGTONII BAIRD, IN WESTERN OREGON. Ph.D. thesis, Oreg. State Univ. 298 p. 1965. [From Dissertation Abstr. 27(11B), 1967.] WR 128: 15
Objectives of this 1960-62 study were to obtain information to control hares, which frequently cause damage to coniferous reproduction in the region, and to compare the life history of this little-studied subspecies with others.

Dunsmore, J. D. NEMATODE PARASITES OF FREE-LIVING RABBITS, ORYCTOLAGUS CUNICULUS (L.), IN EASTERN AUSTRALIA. III. VARIATIONS IN THE NUMBERS OF PASSALURUS AMBIGUUS (RUDOLPHI). Australian J. Zool. 14: 635-645, 2 figs. 1966. WR 128: 15

Turček, F. J. SEEDS OF WOODY PLANTS IN FECAL PELLETS OF THE EUROPEAN HARE (LEPUS EUROPAEUS). Säugetier. Mitteil. 14(2): 141-142, 1 fig. July 1966. WR 128: 15

Valentinčič, S. BEITRAG ZUR KENNTNIS DER EPIZOOTIOLOGIE DER BRUCELLOSE BEIM FELDHASEN. [CONTRIBUTION TO THE KNOWLEDGE OF THE EPIZOOTIOLOGY OF BRUCELLOSIS IN THE FIELD HARE.] Z. Jagdwissenschaft 10(1): 9-19, 6 figs. Mar. 1964. In German with French and English summ. WR 128: 15
[Ljubljana, Yugoslavia.] Sixty-three of 592 hares examined during a two-year study in Slovenia were found to have brucellosis.

Adams, Glen Darrel. POPULATIONS AND SPATIAL DISTRIBUTION OF POCKET GOPHERS (GEOMYS B. BURSARIUS). Ph.D. thesis, Univ. Mich. 146 p. 1966. [From Dissertation Abstr. 27(12B), 1967.] WR 128: 16

Population parameters, seasonal activity, spatial distribution and movements of Geomys bursarius Shaw were estimated; and these attributes were related to certain environmental factors and to intraspecific mechanisms.

Bergstedt, Bo. HOME RANGES AND MOVEMENTS OF THE RODENT SPECIES CLETHRIONOMYS GLARBOLUS (SCHREBER), APODEMUS FLAVICOLLIS (MELCHIOR) AND APODEMUS SYLVATICUS (LINNE) IN SOUTHERN SWEDEN. Oikos 17(2): 150-157. 1966. [From Biol. Abstr. 48(15), 1967. With Russian summ.] WR 128: 16

[Univ. Lund, Lund, Sweden.]

Birkenholz, Dale E. THE HARVEST MOUSE (REITHRODONTOMYS MEGALOTIS) IN CENTRAL ILLINOIS. Ill. State Acad. Sci. Trans. 60(1): 49-53. 1967. [From Biol. Abstr. 48(12), 1967.] WR 128: 16

[Ill. State Univ., Normal.]

Blus, Lawrence. SOME ASPECTS OF GOLDEN MOUSE ECOLOGY IN SOUTHERN ILLINOIS. Trans. Ill. Acad. Sci. 59(4): 334-341. 1966. [From Biol. Abstr. 48(15), 1967.] WR 128: 16

[Patuxent Wildl. Res. Center, Laurel, Md.] A 1-year study of the ecology of the southern golden mouse, Ochrotomys nuttalli aureolus, in southern Illinois revealed that honeysuckle thickets, canebrakes, and cat-brier thickets provided suitable habitat. The average home range of 5 adults was 1.2 acres, and the greatest linear distance traveled by 9 individuals averaged 240 ft. Utilization of arboreal nests seemed to lack a definite pattern; this indefiniteness was further complicated by the undetermined degree of usage of ground nests. Main food items identified were small acorns and seeds of poison ivy, bedstraw, and blackberry.

Brown, Larry N. ECOLOGICAL DISTRIBUTION OF MICE IN THE MEDICINE BOW MOUNTAINS OF WYOMING. Ecology 48(4): 677-680. Summer 1967. WR 128: 16

[Univ. Wyoming, Laramie.] The western jumping mouse (Zapus princeps) and long-tailed vole (Microtus longicaudus) reached their highest densities in three habitats: willow-alder, aspen forest, and subalpine meadows. Both species preferred sites near water and having dense ground cover. The montane vole (Microtus montanus) was most abundant in alpine tundra and subalpine forb-sedge meadows. This species preferred moderately dry situations and dense to intermediate cover. The redbacked vole (Clethrionomys gapperi) was the dominant species in lodgepole pine and spruce-fir communities. This species occurred at a distance from water and was equally abundant in areas of dense, intermediate or sparse vegetative cover. The heather vole (Phenacomys intermedius) was most often taken in subalpine meadows, spruce-fir forest, and alpine tundra. Heather voles showed no preference in regard to nearness of water or density of cover. The deer mouse (Peromyscus maniculatus) was widely distributed in different habitats but was particularly abundant in mountain mahogany and sagebrush communities.--From abstr. Courtesy/ Paul A. Stewart.

Dubrovskii, Yu. A. [THE MOLE RAT OF ISSYK-KUL BASIN AND ITS EFFECT ON VEGETATION AND SOIL.] Mater. Poznaniyu Fauny Flory SSSR Otdel Zool. 40(55): 121-144. 1965. [From Biol. Abstr. 48(13), 1967, from Referat. Zhur., Biol., 1966, no. 3I555. Transl. of Russian abstr. Original with English summ.] WR 128: 16

Fuller, W. A. ECOLOGIE HIVERNALE DES LEMMINGS ET FLUCTUATIONS DE LEURS POPULATIONS. [WINTER ECOLOGY OF THE LEMMINGS AND FLUCTUATION OF THEIR POPULATIONS.] Terre & Vie 1967(2): 97-115, 7 figs. 1967. In French with English summ. WR 128: 16

[Univ. Alberta, Edmonton, Canada.] The populations of lemmings are normally held at low levels by adverse environmental factors, chiefly factors associated with snow. However, the fertility of these animals is so great that if there

is a temporary relaxation in the environmental control mechanism, a population peak can be produced in a few months--a period of winter breeding, followed by a normal summer reproductive period. To produce a lemming outbreak the following sequence of events should occur: 1) vegetation should be quick-frozen in order to preserve its nutrient value; 2) the fall critical period should be short in order to permit the maximum number of animals to enter the winter; 3) snowfall should be sufficient to ensure that the subnivean temperature does not fall much below 0°C, so that winter breeding can occur; 4) spring should come early and quickly with much sublimation of the snow, rather than melting, and green vegetation should appear early to give the animals the energy and protein source necessary for growth and reproduction.--From summ.

Gennaro, Antonio L. NORTHERN GEOGRAPHIC LIMITS OF FOUR SPECIES OF DESERT RODENTS IN THE RIO GRANDE VALLEY. Ph.D. thesis, Univ. N. Mex. 91 p. 1967. [From Dissertation Abstr. 27(11B), 1967.] WR 128: 17
"Peromyscus eremicus, Perognathus intermedius, Dipodomys merriami, and Onychomys torridus."

Harvey, Michael J., and Robert L. Packard. COTTON RATS FAIL TO DAMAGE SOUTHERN PINE SEEDLINGS. J. Forestry 65(7): 495-497. July 1967. WR 128: 17
[Memphis State Univ., Memphis, Tenn.] Abstract: A grassy area of approximately one acre was enclosed and divided into four equal subdivisions. Small mammals were removed by trapping. One-year-old loblolly, shortleaf, and slash pine seedlings were planted in each of the four subdivisions. Cotton rats were released (8, 4, 2, and 0) in the subdivisions. Three months later 16 additional cotton rats were released in the subdivision which originally contained 8 rats. Trapping was conducted at 40-day intervals to check the cotton rat population and to remove possible infiltrators. Trees were examined weekly. No damage to pine seedlings by cotton rats was detected.

Hepworth, Joseph Leland. HEMATOLOGY OF SIGMODON HISPIDUS: AVERAGE PARAMETERS COMPARED WITH THOSE UNDER INDUCED STRESSES. Ph.D. thesis, Okla. State Univ. 79 p. 1966. [From Dissertation Abstr. 27(12B), 1967.] WR 128: 17

Kaletskaya, M. L. [BIOLOGY OF THE WATER RAT IN THE RYBINSK RESERVOIR.] Mater. Poznaniyu Fauny Flory SSSR Otdel Zool. 40(55): 87-120. 1965. [From Biol. Abstr. 48(13), 1967, from Referat. Zhur., Biol., 1966, no. 11542. Transl. of Russian abstr. Original with English summ.] WR 128: 17

Karaseva, E. V., and L. M. Shilyaeva. [THE STRUCTURE OF HAMSTER BURROWS IN RELATION TO ITS AGE AND THE SEASON.] Bull. Moscow Obshch. Ispit. Prirody (Biol.) 70(6): 30-39, illus. 1965. [From Biol. Abstr. 48(16), 1967. In Russian with English summ.] WR 128: 17

Kostelecka-Myrcha, A. VARIATION OF MORPHO-PHYSIOLOGICAL INDICES OF BLOOD IN CLETHRIONOMYS GLAREOLUS (SCHREBER, 1780). Acta Theriol. 12(13): 191-222, 15 figs. 1967. With Polish summ. WR 128: 17
[Mammals Res. Inst., Polish Acad. Sci., Białowieża, Poland.]

Mermod, Claude. FLUCTUATIONS D'UNE POPULATION DE MULOTS EN 1964. [FLUCTUATIONS IN A POPULATION OF WOOD MICE (APODEMUS SYLVATICUS AND A. FLAVICOLLIS) IN 1964.] Rev. Suisse Zool. 72(3): 624-629, illus. 1965. [From Biol. Abstr. 48(15), 1967. In French.] WR 128: 17
[Univ. Lausanne, Lausanne, Switzerland.]

Sheppe, Walter. DETERMINANTS OF HOME RANGE IN THE DEER MOUSE, PEROMYSCUS LEUCOPUS. Proc. Calif. Acad. Sci. 34(7): 377-418, illus. 1966. [From Biol. Abstr. 48(12), 1967.] WR 128: 17
[Calif. Acad. Sci., San Francisco.]

Sloan, Raymond L. A STUDY OF THE SMALL RODENTS OF BLACK HAWK COUNTY, IOWA (1961-1962). Proc. Iowa Acad. Sci. 71: 519-525. 1965. [From Biol. Abstr. 48 (12), 1967.] WR 128: 18
[State Coll. Iowa, Cedar Falls.]

Smirin, Yu. M. [SEASONAL POPULATION DYNAMICS IN FOREST MURINE RODENTS IN THE VICINITY OF MOSCOW.] Bull. Moscow Obshch. Ispit. Prirody (Biol.) 70(6): 13-20, illus. 1965. [From Biol. Abstr. 48(15), 1967. In Russian with English summ.] WR 128: 18

Turner, Ronald W. EFFECTS OF FLOODING ON THE MOUSE PEROMYSCUS LEUCOPUS. Trans. Ill. State Acad. Sci. 59(4): 390-391. 1966. WR 128: 18
[Univ. Kans., Lawrence.] Abstract: Marked individuals of Peromyscus leucopus apparently were eliminated in an area inundated by flooding. Re-invasion of the area after flooding was by unmarked individuals.

Visinescu, Niculina. RESEARCHES ON NICTHERMAL AND SEASONAL VARIATIONS OF ENERGETIC METABOLISM IN CLETHRIONOMYS GLAREOLUS AND APODEMUS SYLVATICUS. Rev. Roumaine Biol. Ser. Zool. 10(3): 183-189, illus. 1965. [From Biol. Abstr. 48 (12), 1967.] WR 128: 18

RATTUS & MUS

DeLong, Karl T. POPULATION ECOLOGY OF FERAL HOUSE MICE. Ecology 48(4): 611-634, 6 figs. Summer 1967. WR 128: 18
[Grinnell Coll., Grinnell, Iowa.] Four major population declines were observed. Epidemic disease caused mortality in one. A second population declined in the fall when insufficient food caused cessation of reproduction. The addition of supplemental food on two experimental grids, however, was sufficient to support both high growth rates and high recruitment of young during the winter, but supplemental food was not sufficient to maintain breeding indefinitely. These populations declined during the usual breeding season in the presence of supplemental and natural food, abundant cover, and few predators. It therefore seemed probable that these two populations were not limited by external factors, but by some intrinsic mechanism. Increased emigration and mortality, primarily of juveniles and subadults, occurred during the latter part of the population increase, but the decline of these populations was primarily caused by a large reduction in the number of weaned young per lactating female, and finally by cessation of breeding condition in females.--From abstr. Courtesy/ Paul A. Stewart.

Kepler, Cameron B. POLYNESIAN RAT PREDATION ON NESTING LAYSAN ALBATROSSES AND OTHER PACIFIC SEABIRDS. Auk 84(3): 426-430, 2 figs. July 1967. WR 128: 18
[Cornell Univ., Ithaca, N.Y.] Polynesian rats (Rattus exulans) ate the flesh from the backs of living Laysan albatrosses (Diomedea immutabilis).--Courtesy/ Paul A. Stewart.

SCIURIDS

Davis, David E. THE ROLE OF ENVIRONMENTAL FACTORS IN HIBERNATION OF WOODCHUCKS (MARMOTA MONAX). Ecology 48(4): 683-689, 2 figs. Summer 1967. WR 128: 18
[N.C. State Univ., Raleigh.] Woodchucks became torpid when deprived of food and held at 6° C, but they did not become torpid when fed and held at 6° C. Woodchucks that took food when aroused from torpor did not return to torpor unless they were again deprived of food. Thin woodchucks became torpid as readily as fat ones. The latency of torpidity was about one week long in December and about one month in March. Woodchucks had bouts of torpor, at first lasting 4-5 days but later lasting 10-12 days. Woodchucks in the laboratory remained in hibernation as long as eight months, with alternate bouts of torpor and arousal.--Courtesy/ Paul A. Stewart.

Hohn, Bonnie M., and William H. Marshall. ANNUAL AND SEASONAL WEIGHT CHANGES IN A THIRTEEN-LINED GROUND SQUIRREL POPULATION, ITASCA STATE PARK, MINNESOTA. J. Minn. Acad. Sci. 33(2): 102-106, illus. 1966. [From Biol. Abstr. 48(13), 1967.] WR 128: 19
[Univ. Minn., Minneapolis.] Studies conducted during 1954-1964.

Kline, Paul D. IOWA SQUIRRELS: HUNTING STATISTICS, SEX AND AGE RATIOS, AND THE INFLUENCE OF MAST AND AGRICULTURE. Proc. Iowa Acad. Sci. 71: 216-227. 1965. [From Biol. Abstr. 48(12), 1967.] WR 128: 19
[Iowa Conserv. Comm., Des Moines.]

Smith, Ronald E. NATURAL HISTORY OF THE PRAIRIE DOG IN KANSAS. Univ. Kans. Museum Nat. Hist. Misc. Publ. no. 49. p. 1-39, 10 figs. + 4 pls. 27 Sept. 1967. WR 128: 19
"Pages 1-36 are reprinted by the offset process, from Miscellaneous Publication No. 16 of the Museum series. Addenda by Stephen R. Wylie appear on pages 38-39."

Soldatova, A. N. [EFFECT OF POPULATION DENSITY AND METEOROLOGICAL CONDITIONS ON THE MOVEMENTS OF THE LITTLE SOUSLIK (CITELLUS PYGMAEUS).] Biol. Nauk. 1: 37-41, illus. 1966. [From Biol. Abstr. 48(12), 1967. In Russian.] WR 128: 19

Waring, George Houstoun. SOUNDS OF BLACK-TAILED, WHITE-TAILED, AND GUNNISON'S PRAIRIE DOGS. Ph.D. thesis, Colo. State Univ. 86 p. 1966. [From Dissertation Abstr. 27(12B), 1967.] WR 128: 19
The sounds of black-tailed, white-tailed, and Gunnison's prairie dogs were studied in Colorado and Wyoming from February, 1964 to June, 1966. Observations, photographs, and tape recordings were made in the field and were supplemented by data collected from captive prairie dogs. The sounds were tape-recorded on a battery-powered tape recorder at 15 inches per second and analyzed on a sound spectrograph. An unidirectional dynamic microphone was used with the recorder. Each species can be identified by certain sounds unique to it, although, in general, all three species emit sounds under similar circumstances. The same sound may have different uses under different ecological conditions. For this reason all sounds were named for physical rather than functional characteristics.

BEAVER

Drolet, Charles A. RAPPORT PRELIMINAIRE DU TRAVAIL D'ETE 63' SUR L'HABITAT DU CASTOR A LA BAIE JAMES. [PRELIMINARY REPORT OF WORK DONE DURING THE SUMMER OF 1963 ON THE BEAVER IN THE JAMES BAY (CANADA).] Quebec Serv. Faune Rapp. 3: 347-348. 1964. [From Biol. Abstr. 48(16), 1967. In French.] WR 128: 19

Panfil, Jan. BEAVER / A VANISHING ANIMAL IN POLAND. Published pursuant to an agreement with the Department of the Interior and the National Science Foundation, Washington, D.C., by the Central Institute for Scientific, Technical and Economic Information (Warsaw, Poland). OTS 63-11352. 43 p., 22 figs. 1964. Translated reprint of Polish pamphlet entitled "Bóbr zwierze ginace w Polsce" published by the Center for Nature Protection of the Polish Acad. Sci. (Krakow). 64 p. 1960. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va. Price 50¢.] WR 128: 19
Contents: Systematics, morphology, biology and habits of the beaver; and a description of beaver reserves and stations outside the reserves.

MUSKRAT & NUTRIA

Buyakovich, N. G. [SUB-ICE LIFE OF THE MUSK RAT IN THE FAR NORTH.] Zool. Zhur. 45(8): 1270-1271, illus. 1966. [From Biol. Abstr. 48(15), 1967. In Russian with English summ.] WR 128: 20

[All-Union Res. Inst. Animal Raw-material, Furs, Kirov, USSR.] The musk rat has found favorable biotopes for its life and dispersal beyond the polar circle within the limits of the Yakutsk ASSR. In the course of long and severe winter the animal has developed a specific device for the life under the ice, blowing holes in the thick ice of lakes near its burrows in the banks. Utilizing the blown holes, the animal feeds upon water plants on the ice surface under the snow-cover.

Gedymin, Jerzy. DIAGNOSIS OF PREGNANCY AND ITS ADVANCEMENT IN NUTRIA (MYOCASTOR COYPUS) ON THE BASIS OF EXTERNAL CHANGES OF PAPILLAE. Published for the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Scientific Publications Foreign Cooperation Center of the Central Institute for Scientific, Technical and Economic Information (Warsaw, Poland). TT 66-57046. Polish original from Med. Weter. no. 11. p. 650-652, 2 figs. 1964. [Translation available from the U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 20

McCarthy, Jack. NUTRIA--NUISANCE OR NECESSITY? Md. Conservationist 44(2): 17-19, illus. Apr. 1967. WR 128: 20

The pros and cons of the nutria. Control and utilization are urged rather than eradication in Maryland.

Steffen, Jadwiga. OBSERVATIONS ON DISEASE OCCURRING IN MASS BREEDING OF COYPU. Published for the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Scientific Publications Foreign Cooperation Center of the Central Institute for Scientific, Technical and Economic Information (Warsaw, Poland). TT 66-57045. 10 p. 1967. Polish original from Medycyna Weterynaryjna 11(5): 270-275. 1955. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 20

BEARS

Harger, Elsworth M. HOMING BEHAVIOR OF BLACK BEARS. Mich. Dept. Conserv. Res. & Development Rept. no. 118. 13 p., 1 fig., mimeo. 21 July 1967. WR 128: 20

[Cusino Wildl. Res. Sta., Shingleton, Mich.] Summary: Evidence obtained from the recovery of 18 out of 43 black bears that were transported and released suggests a strong homing behavior. These homing movements did not appear to be random, but rather were a definite movement toward home. Considerably poorer homing ability was noted for cubs than for older bears. The method by which a bear returns home is not understood at this time. It seems certain, however, that the black bear should be added to the growing list of species that exhibit strong homing behavior. We hope in the near future to shed some light on the means of homing employed by the black bear through the use of radio-telemetry.

Tratz, E. P. BEITRAG ZUR BIOLOGIE DES BRAUNBÄREN (URSUS ARCTOS L. 1758). [CONTRIBUTION ON THE BIOLOGY OF URSUS ARCTOS.] Z. Jagdwissenschaft 9(2): 41-48, 9 figs. June 1963. In German with French and English summ. WR 128: 20

Behavior of bear in the virgin forests of Gottscheer [Jugoslavia].

MUSTELIDS

Mead, Rodney Adair. REPRODUCTION IN THE SPOTTED SKUNK (SPILOGALE PUTORIUS). Ph.D. thesis, Univ. Mont. 125 p. 1966. [From Dissertation Abstr. 27(12B), 1967.] WR 128: 21

DOGS, WOLVES, FOXES

Dudzinski, W., A. Haber, and G. Matuszewski. DIE VERBREITUNG DES MARDERHUNDES (NYCTEREUTES PROCYONOIDES GRAY) IN POLEN. [THE DISTRIBUTION OF NYCTEREUTES PROCYONOIDES IN POLAND.] Z. Jagdwissenschaft 9(3): 98-105, 1 fig. Sept. 1963. In German with French and English summ. WR 128: 21

Summary: The raccoon dog (Nyctereutes procyonoides Gray) is extending its area of existence from the acclimatization territories in the European parts of the USSR, and is advancing to the West. Its advance in Poland is described for the years from 1955 to 1962. A list with dates concerning raccoon dogs observed or shot offers an extensive surmise of the extension and increase of their numbers. Most of the observations come from the administrative districts of Bialystok and Olsztyn (Allenstein), and these represent a centre for further expansion which is going to proceed along the larger river valleys to the West.

Hornberger, F. W. DER WOLF IN OSTPREUSSEN 1900-1945. [THE WOLF IN EAST PRUSSIA, 1900-1945.] Z. Jagdwissenschaft 9(3): 82-98, 1 fig. Sept. 1963. In German with French and English summ. WR 128: 21

Lamina, J. DER PARASITENBEFALL BEI ROTFÜCHSEN IN SÜDHESSEN. [THE PARASITE BURDEN AMONG RED FOXES IN SOUTH HESS.] Z. Jagdwissenschaft 10(4): 137-142. Dec. 1964. In German with English and French summ. WR 128: 21

[Inst. Zoonosenforschung., Frankfort/Main, Germany.] Of 200 Vulpes vulpes examined only 7 were free from endoparasites.

Van Bree, P. J. H., F. Chanudet, and M. C. Saint Girons. SUR UNE COLLECTION DE BACULA DE RENARDS, VULPES VULPES (LINNAEUS, 1758) PROVENANT DE FRANCE. [ON A COLLECTION OF BACULA IN FOXES, VULPES VULPES (LINNAEUS, 1758) FROM FRANCE.] Vie Milieu 17(1C): 511-514, illus. 1966. [From Biol. Abstr. 48(17), 1967. In French with English and German summ.] WR 128: 21

Vasiliu, George D. DER MARDERHUND (NYCTEREUTES PROCYONOIDES GRAY) IN RUMÄNIEN. [THE RACCOON DOG (NYCTEREUTES PROCYONOIDES) IN ROMANIA.] Z. Jagdwissenschaft 10(2): 51-54, 2 figs. June 1964. In German with French and English summ. WR 128: 21

Raccoon dog first appeared in Romania in 1951 near Bucharest.

Yakushkin, G. [THE ARCTIC-FOX GROUNDS ALONG THE NORTHERN YENISEI.] Okhota & Okhotnich'e Khoz. 1965(7): 13-15. 1965. [From Biol. Abstr. 48(13), 1967, from Referat. Zhur., Biol., 1966, no. 11587. Transl. of Russian abstr.] WR 128: 21

BIG GAME, GENERAL

Alfeeva, S. P., and E. N. Pavlovskii. THE EFFECT OF OEDEMAGENA TARANDI LARVAE ON THE SKIN OF REINDEER. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51238. 10 p., 13 figs. 1967. Russian original from Parazitol. Sbornik Zool. Inst. 22: 173-183. 1964. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 21

Conclusions: The growth of connective tissue around the warble fly larvae in the subcutaneous cellular tissue of reindeer is accompanied by a markedly expressed necrosis of the host's body cells, evidently stimulated by larval

secretions. During motion, and subsequently also during the parasite's exit, the healing of fistulas and disappearance of connective tissue growths are impeded by the presence of chitinous cuticles, cast off during molting, with particularly persistent black spikelets. In the drive to secure good quality reindeer skins and to successfully apply prophylactic measures, one must remember that the earlier the larvae are killed, the smaller the defect remaining in the skin.

Bannikov, A. G., L. V. Zhirnov, L. S. Lebedeva, and A. A. Fandeev. BIOLOGY OF THE SAIGA. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51260. iv + 252 p., 102 figs. 1967. Russian original published by Izdat. Sel'skokhozyaistvennoi Lit., Zhur. & Plakatov (Moscow) in 1961. [Translation available from the U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 22

Contents: Literature survey; Features and taxonomy; Geographical distribution and history of the range; Size and density of population; Habitats, distribution and migrations; Manifestation of the herd instinct; Diet, water and grazing regime, nutritional condition; Cycle of daily activity and behavior; Breeding; Growth and development; Age changes in the cranium and dental formula, growth of horns, age determination; Enemies, parasites, diseases, death from natural disasters; Dynamics of saiga populations; Practical importance; Bibliography.

Bear, George D. THE WOUNDING LOSS ON ANTELOPE. Colo. Outdoors 16(5): 33-34. Sept.-Oct. 1967. WR 128: 22

Aerial and ground surveys indicated wounding losses were as follows: 15% in 1963; 25% in 1964; 5% in 1965; and 4% in 1966.

Borozdin, E. K. DIURNAL PERIODICITY OF SPERMATOGENESIS STAGES IN REINDEER. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51234. 7 p. 1967. Russian original from Izvest. Sibirskogo Otdel. Akad. Nauk SSSR. Ser. Bio.-Med. Nauk no. 4, pt. 1. p. 101-105. 1964. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va. Price $1.00.] WR 128: 22

Davydov, A. F. ON THE PROCESSES OF MUSCULAR ACTIVITY IN REINDEER DURING PROCUREMENT OF FEEDS FROM UNDER THE SNOW. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51229. 8 p. 1967. Russian original from Sbornik "Opyt izucheniya regulyatsii fiziologicheskikh funktsii v estestvennykh uslovyakh sushchestvovaniya organizmov," vol. 6: 35-40. 1963. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 22

Conclusions: The mode of muscular activity of reindeer in winter is conditioned to a considerable degree by the depth and physicomechanical properties of the snow. Digging deep, loose snow is accompanied by greater fatigue than digging shallow, hard, dense snow. Under inclement conditions for digging for food (appearance of frozen snowcrust on the surface of deep, loose snow), fatigue developed faster, as expressed in shorter work periods and the reduction of the daily period devoted to foraging. More rapid development of fatigue when digging deep, loose snow on forest pastures, as compared to mountainous tundra, is not indicative of increased energy expenditure in obtaining food, as evidenced by a considerably lower weight loss in the absence of substantial nutritive differences of the two types of pasture.

Des Meules, Pierre. THE INFLUENCE OF SNOW ON THE BEHAVIOR OF MOOSE. Quebec Serv. Faune Rapp. 3: 51-73, illus. 1964. [From Biol. Abstr. 48(15), 1967.] WR 128: 23

Frankenberger, Z. GIBT ES BEIM EUROPÄISCHEN REH ZWEI SCHÄDELTYPEN? [ARE THERE TWO TYPES OF SKULLS AMONG THE EUROPEAN ROE DEER?] Z. Jagdwissenschaft 9 (2): 48-53, 8 figs. June 1963. In German with French and English summ. WR 128: 23

Summary: Considering the form of roe buck skulls two fundamental types are [recognized]: the bottle type and the wedge type. Between those two extreme types there exist all possible intermediate types. By measuring 72 skulls of roe bucks that at least reached an age of 3 years, index values could be found indicating the existence of two genotypical fundamental forms.

Geptner, V. [THE SPREAD OF MOOSE INTO THE CAUCASUS.] Okhota & Okhotnich'e Khoz. 1965(8): 19. 1965. [From Biol. Abstr. 48(13), 1967, from Referat. Zhur., Biol., 1966, no. 11492. Transl. of Russian abstr.] WR 128: 23

Harper, James A., Joseph H. Harn, Wallace W. Bentley, and Charles F. Yocom. THE STATUS AND ECOLOGY OF THE ROOSEVELT ELK IN CALIFORNIA. Wildl. Monographs no. 16. 49 p., 20 figs. Aug. 1967. WR 128: 23

[Oreg. State Game Comm., Coos Bay.] Contents: Distribution and abundance of Roosevelt elk past and present, Physical characteristics of Roosevelt elk, Description of Prairie Creek study area, Range studies on Prairie Creek Redwoods State Park, Food habits of Roosevelt elk, Social behavior of Roosevelt elk, and Natality and mortality of Roosevelt elk.

Hemmer, H. ZUR FRAGE GENETISCHER GRUNDLAGEN BEI GEWEIHMISSBILDUNGEN DES REHES (CAPREOLUS CAPREOLUS). [THE GENETIC BASIS FOR ANTLER MALFORMATION IN THE ROE DEER (CAPREOLUS CAPREOLUS).] Z. Jagdwissenschaft 10(4): 176-182, 2 figs. Dec. 1964. In German with English and French summ. WR 128: 23

[Univ. Mainz, Mainz, Germany.]

Herzog, A. TRAUMATISCHE VERLETZUNGEN ALS KRANKHEITS- UND TODESURSACHE BEIM SCHALENWILD. [TRAUMATIC INJURIES CAUSING SICKNESS AND DEATH AMONG WILD UNGULATES.] Z. Jagdwissenschaft 10(4): 169-176, 5 figs. Dec. 1964. In German with French and English summ. WR 128: 23

[Justus Liebig Univ., Giessen, Germany.] Discussion of injuries resulting from traffic accidents, shooting, rutting fights and pecking by birds of prey.--From summ.

Kober, W. AKTINOMYKOSE BEIM DAMWILD. [ACTINOMYCOSIS IN THE FALLOW DEER.] Z. Jagdwissenschaft 11(2): 110-111, 5 figs. June 1965. In German. WR 128: 23

Koryakov, B. [MOOSE IN THE NORTH CAUCASUS.] Okhota & Okhotnich'e Khoz. 1965 (6): 16-17. 1965. [From Biol. Abstr. 48(13), 1967, from Referat. Zhur., Biol., 1966, no. 11491. Transl. of Russian abstr.] WR 128: 23

Kovyazin, N. M. SOME PROBLEMS OF DEER-BREEDING DEVELOPMENT IN THE NENETS NATIONAL DISTRICT. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51235. 6 p. 1967. Russian original from Vestnik Leningradskogo Univ. 20(12): 104-109. 1965. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 23

Krechmar, A. V. [WILD REINDEER IN THE BASIN OF THE PYASINA RIVER.] Zool. Zhur. 45(4): 599-608, illus. 1966. [From Biol. Abstr. 48(12), 1967. In Russian with English summ.] WR 128: 23

Kurzaev, G. M., and N. G. Ivanov. TRICHLOROMETAPHOS-3 FOR CONTROLLING SKIN BOTFLY IN REINDEER. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51249. 2 p. 1967. Russian original from Veterinariya 41(2): 45-46. 1965. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 24

Michurin, L. N. ON SOME MORPHOLOGICAL PECULIARITIES OF WILD REINDEER OF THE TAIMYR PENINSULA. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51236. 10 p., 4 figs. 1967. Russian original from Zool. Zhur. 44(9): 1396-1404. 1965. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 24

"Rangifer tarandus taimyrensis." In addition to morphological differences noted, rut and breeding occur a month later than in wild deer of mainland tundras of Europe and of the forest zone of Siberia.

Mitskevich, V. Yu. THE DEVELOPMENTAL CYCLE OF ELAPHOSTRONGYLUS RANGIFERI MIZ., 1958. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51239. 13 p., illus. 1967. Russian original from Sbornik Parazity Sel'skokhozyaistvennykh Zhivotnykh Kazakhstana no. 3. p. 49-60. 1964. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 24

Oloff, Hans-Bernhard. DER ROTWILDBESTAND IM PFÄLZER WALD. [THE STATUS OF RED DEER IN THE PALATINE FOREST.] Z. Jagdwissenschaft 11(1): 1-54, 16 figs. Mar. 1965. In German with French and English summ. WR 128: 24

Osipov, A. N. [TOWARD THE DECIPHERING OF THE DEVELOPMENT CYCLE OF THE NEMATODE SETARIA ALTAICA (RAJEWSKAYA, 1928)--A BRAIN PARASITE OF CASPIAN DEER (CERVUS ELAPHUS MARAL GRAY).] Doklady Akad. Nauk SSSR 168(1): 247-248, illus. 1966. [From Biol. Abstr. 48(17), 1967. In Russian.] WR 128: 24
[K. L. Skryabin All-Union Inst. Helminthol., Moscow, USSR.]

Panin, V. Ya. DEVELOPMENTAL CYCLE OF ELAPHOSTRONGYLUS PANTICOLA, LUBIMOV, 1945. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51240. 15 p., 5 figs. 1967. Russian original from Sbornik Parazity Sel'skokhozyaistvennykh Zhivotnykh Kazakhstana no. 3. p. 34-48. 1964. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 24

E. panticola probably is a specific parasite of marals and spotted deer. In other species of animals (sheep, goats, cattle, horses) pastured together with marals, these parasites have not been detected. Attempts to infect sheep artificially failed.--From concl.

Parovshchikov, V. Ya. WILD REINDEER POPULATION AND DISTRIBUTION IN THE ARKHANGEL'SK NORTH. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51237. 10 p., 6 figs. 1967. Russian original from Zool. Zhur. 44(2): 276-283. 1965. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va. Price $1.00.] WR 128: 24

Summary: The number of wild reindeer in the Arkhangel'sk North increased somewhat during recent decades and reached 4000 head. During 5 years (1956-1961) the stock increased by 10 percent. The habitation areas are mapped

according to the state in 1956 and 1961. Causes and routes of seasonal migrations and causes affecting the distribution and population of reindeer are described.

Polyakov, V. A. THE PROTECTION OF REINDEER AGAINST GADFLIES. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51250. 2 p. 1967. Russian original from Veterinariya 42(6): 91-92. 1965. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 25

Effective use of a combined insecticide-repellent emulsion containing 0.2-0.4% DDVP and 0.15-0.75% Hexamid.

Polyanskaya, M. V. ELAPHOSTRONGYLOSIS OF REINDEER. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51244. 2 p. 1967. Russian original from Vses. Obshch. Gel'mintol. Gel'minty Cheloveka, Zhivotnykh, Rastenii & Bor'ba s Nimi. p. 424-425. 1963. [Translation available from the U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va. Price $1.00.] WR 128: 25

Pryadko, E. I., S. N. Vysokov, and V. S. Frolov. ON THE EPIZOOTOLOGY OF ELAPHOSTRONGYLOSIS IN "PANTY" DEER. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51241. 12 p., 10 figs. 1967. Russian original from Parazity Sel'skokhozyaistvennykh Zhivotnykh Kazakhstana no. 2. p. 74-85. 1963. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 25

Conclusions: On deer-breeding farms of East Kazakhstan elaphostrongylosis is widespread and causes great losses. Young marals up to the age of 1.5 years are most susceptible to elaphostrongylosis. Elaphostrongylosis incidence shows a marked seasonal variability in clinical form; it is as a rule prevalent in winter. Not infrequently, cases of elaphostrongylosis are complicated by Setaria infection of the brain as well as Dictyocaulus and Trichuris. Ditrazine-phosphate, administered subcutaneously, proved ineffective in elaphostrongylosis, but very efficacious against Dictyocaulus infection. Until effective anthelminthics for elaphostrongylosis are discovered, measures for increased organism resistance and sanitation of the parks must be applied.

Savel'ev, D. V., N. P. Mezen'ev, and V. A. Polyakov. THE EFFECTIVENESS OF DIPTEREX AND ITS HOMOLOGOUS ETHYL COMPOUND FOR THE CONTROL OF SUBCUTANEOUS GADFLY LARVAE IN REINDEER. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51242. 4 p. 1967. Russian original from Trudy Vses. Nauch.-Issled. Inst. Vet. Sanitarii 24: 335-338. 1964. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va. Price $1.00.] WR 128: 25

Conslusions: Dipterex given orally or subcutaneously has a weak effect on subcutaneous gadfly in the second larval stage. In our experiments it did not exceed 31.8%. The homologous ethyl compound of Dipterex is practically insoluble in water. A 10% aqueous suspension given orally in doses of 100-250 mg/kg liveweight, and subcutaneously in doses of 35 and 50 mg/kg, was completely ineffective--the death rate did not exceed 2.6%.

Struhsaker, Thomas T. BEHAVIOR OF ELK (CERVUS CANADENSIS) DURING THE RUT. Z. Tierpsychol. 24: 80-114, 22 figs. 1967. In English with German summ. WR 128: 26

[Rockefeller Univ., New York, N.Y.] Detailed qualitative and quantitative information obtained during a 2-month study during the 1965 rutting season in Banff National Park of the Canadian Rockies.

Stubbe, Ch. SCHALENWILDVERLUSTE IM WINTER 1962/63. [LOSSES AMONG WILD UNGULATES IN THE WINTER 1962/63.] Z. Jagdwissenschaft 9(4): 121-124, 2 figs. Dec. 1963. In German with English and French summ. WR 128: 26

[Inst. Forstzool., Eberswalde, Germany.] More female than male roe deer were found dead and more males than females of the mouflon were found. Young and very old were first to fall victims to winter weather. There was a direct relation between population density and losses.--From summ.

Ueckermann, E., and W. Hartfiel. DIE VERDAULICHKEIT VON FRISCHER FICHTEN-RINDE NACH VERSUCHEN BEI ROTWILD. [ON THE DIGESTIBILITY OF FRESH BARK OF FIR. EXPERIMENTS WITH RED DEER.] Z. Jagdwissenschaft 9(2): 54-62, 5 figs. June 1963. In German with English and French summ. WR 128: 26

Vashkevich, R. B. REACTION AND IMMUNITY IN REINDEER VACCINATED WITH BRUCELLA ABORTUS STRAIN 19 VACCINE. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51248. 4 p. 1967. Russian original from Veterinariya 41(2): 45-47. 1964. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 26

Yoakum, Jim. LITERATURE OF THE AMERICAN PRONGHORN ANTELOPE / AN ANNOTATED BIBLIOGRAPHY WITH ABSTRACTS EMPHASIZING FOOD HABITS AND RANGE RELATIONSHIPS. USDI, Bur. Land Mgmt. (Reno, Nevada). vi + 82 p. 1967. WR 128: 26

[Nevada State Office, 300 Booth St., Reno, Nev.] Abstract: This annotated bibliography with abstracts brings together 354 references on the taxonomy, life history, and management of the American pronghorn antelope (Antilocapra americana Ord). Special emphasis was given to reports pertaining to food habits and range conditions as related to antelope biology and management. Included is literature from the earliest known publication on the pronghorn dated 1723 to documents printed through December, 1966.

Zerchaninov, L. K., and G. V. Kondinskii. THE INCIDENCE OF TOXOPLASMOSIS IN THE TYUMEN REGION. Published pursuant to an agreement with the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Israel Program for Scientific Translations (Jerusalem). TT 67-51245. 4 p. 1967. Russian original from Zhur. Mikrobiol. & Immunol. 42(2): 55-58. 1965. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 26

Conclusions: The incidence of a positive skin test reaction for toxoplasmosis antigen was approximately the same among 761 inhabitants of the southern and northern parts of the Tyumen Region (Lugovskii sovkhoz--18.6%, Kondinskii sovkhoz--12.9%, and Polyarnyi sovkhoz--14.6%). A positive skin test reaction was found more frequently among women, mainly between the ages of 21 and 50 years. The positive skin test reaction as well as a positive complement fixation reaction found among the workers of the Polyarnyi sovkhoz indicated that toxoplasmosis is endemic there. The test was positive in 11 out of 27 women with abnormal pregnancies or deliveries (congenital deformities, abortions, etc.). Complement fixation reaction was negative in all of the blood serum samples obtained from 659 domestic animals (cows, pigs, horses). Twenty percent of reindeer blood sera showed a positive complement fixation reaction to toxoplasmosis antigen. This indicates that reindeer play a definite role in the propagation of toxoplasmosis among humans in the Far North.

DEER (Odocoileus)

Anderson, Allen E. HUNTING AND THE CACHE LA POUDRE DEER HERD. Colo. Outdoors 16(5): 13-15, illus. Sept.-Oct. 1967. WR 128: 27
A steady decline in Cache la Poudre mule deer hunters and harvest for 1959-1965 prevailed despite the fact that winter population levels were stable or slightly increasing from 1962 to 1965.

Bailey, James A. MINERAL CONTENT OF DEER BROWSE ON THE HUNTINGTON WILDLIFE FOREST. N.Y. Fish & Game J. 14(1): 76-78. Jan. 1967. WR 128: 27
[Ill. Nat. Hist. Surv., Urbana.] "Eleven of the 20 species of browse from the Huntington Forest had phosphorus concentrations of less than 0.16 per cent. Only wild raisin and elderberry had levels above 0.2 per cent. Except for red spruce which is seldom eaten by deer, only balsam fir, hemlock and elderberry had calcium-phosphorus ratios of less than 3.0. Most species of browse which are heavily used by wintering deer had ratios of more than 5.0. These data suggest a phosphorus deficiency in deer browse on the Huntington Forest. However, it has not been shown that lower mortality or greater reproductive success would result from improving the phosphorus nutrition of these deer."

Barick, Frank. 1966 MANAGEMENT AREA DEER HUNT REPORT. Wildl. in N.C. 31 (4): 16-19, 31. Apr. 1967. WR 128: 27
[N.C. Wildl. Resources Comm., Raleigh.] "The 2,517 deer kill was exceeded only in 1963 when 2,747 were taken. Total kill was 26 percent higher than last year, and on the average it took 18 hunter-days to make a kill as compared with 19 hunter-days last year, i.e., more deer were killed by fewer hunters."

Barick, Frank. WHY HAS DEER RESTORATION FAILED IN DISTRICT NINE? Wildl. in N.C. 31(5): 6-7. May 1967. WR 128: 27
[N.C. Wildl. Resources Comm., Raleigh.] A plea for the complete separation of bear hunting from deer hunting in the western part of North Carolina.

Dorrance, Michael J. A LITERATURE REVIEW ON BEHAVIOR OF MULE DEER. Colo. Game, Fish & Parks and Colo. Coop. Wildl. Res. Unit, Spec. Rept. no. 7. iv + 26 p. 1967. Price $1.00. WR 128: 27
The taxonomy, daily activity, individual behavior, intraspecific behavior, and interspecific behavior of Odocoileus hemionus as revealed by the literature.

Halla, Bernard. 1966 DEER REPORT. Md. Conservationist 44(2): 14-16. Apr. 1967. WR 128: 27
Analysis of Md. deer harvest by county and type of season for 1966 compared with other years during 1962-1966 and a graphic summary of the increase in harvest since 1930.

Yancey, Richard K. DELTA DEER ROUND-UP. La. Conserv. 19(5&6): 6-7, illus. May-June 1967. WR 128: 27
Photo-story of the capture of 104 deer during a half day of trapping. Through the effective use of one helicopter, one spotter plane, one marsh motorcycle, one tugboat, a barge, two trucks, personnel and radio hook-up between ground and air twenty percent of the deer population was removed during this single operation.

MAMMALS--MARINE

Burns, John J. THE PACIFIC BEARDED SEAL. Alaska Dept. Fish & Game. iii + 66 p., 12 figs. July 1967. WR 128: 27
Physical characters, growth and age, food habits, parasites, reproduction, behavior, distribution and migration, exploitation and population dynamics, and management of Erignathus barbatus nauticus.

De Blas, Luis. UNA NUEVA FOCA DE LA ESPECIE HALICHOERUS GRYPUS (FABRICIUS) CAPTURADA EN SANTONA. [A NEW FOCUS FOR THE HALICHOERUS GRYPUS (FABRICIUS) CAPTURED IN SANTONA (GREY SEAL OR ATLANTIC SEAL).] Bol. Real. Soc. Espan. Hist. Nat. 62(2): 233-234, illus. 1964. [From Biol. Abstr. 48(13), 1967. In Spanish.] WR 128: 28

Fedoseev, G. A. [THE DIET OF RINGED SEAL (PUSA HISPIDA SCHR.).] Izvest. Tikhookeanskogo Nauch.-Issled. Inst. Rybn. Khoz. Okeanogr. 59: 216-223. 1965. [From Biol. Abstr. 48(13), 1967, from Referat. Zhur., Biol., 1966, no. 2I584. Transl. of Russian abstr.] WR 128: 28

Fedoseev, G. A. [A NOTE ON THE ECOLOGY OF SEAL REPRODUCTION IN THE NORTHERN SEA OF OKHOTSK.] Izvest. Tikhookeanskogo Nauch.-Issled. Inst. Rybn. Khoz. Okeanogr. 59: 212-216. 1965. [From Biol. Abstr. 48(13), 1967, from Referat. Zhur., Biol., 1966, no. 2I580. Transl. of Russian abstr.] WR 128: 28
"Pusa hispida, Erignathus barbatus and Histriophoca fasciata."

Fiscus, Clifford H., and Hiroshi Kajimura. PELAGIC FUR SEAL INVESTIGATIONS, 1965. US F&WS, Spec. Sci. Rept.--Fisheries no. 537. v + 42 p., 25 figs. Feb. 1967. WR 128: 28
[Marine Mammal Biol. Lab., Seattle, Wash.] As in other years, males formed only a small proportion of the total number of fur seals wintering off California. Twenty tagged seals (including seven that had lost their tags) were collected in 1965. Of 387 females collected in 1965, 45% were nulliparous, 12% were nonpregnant primiparous or multiparous, and 44% were pregnant. Three primiparous 5-year-olds were the youngest pregnant seals taken. Data collected since 1958 on 5,057 pregnant females show that 51.3% of the pregnancies occurred in the left uterine horn; the first pregnancy occurs more frequently in that horn. Male and female fetuses were about equally represented (50.8% females) in 4,369 fetuses.--From summ.

Gilmore, Raymond M., Robert L. Brownell, Jr., James G. Mills, and Al Harrison. GRAY WHALES NEAR YAVAROS, SOUTHERN SONORA, GOLFO DE CALIFORNIA, MEXICO. Trans. San Diego Soc. Nat. Hist. 14(16): 197-204, 1 fig. 18 Aug. 1967. With Spanish summ. WR 128: 28
[Museum Nat. Hist., San Diego, Calif.] Abstract: California gray whales have calved annually, in the Golfo de California, only at Bahía Reforma and near Yavaros, on the east side. Details of calving and population at Bahía Reforma have been published (Gilmore and Mills, 1962). In this article, the authors have described the calving and population at Yavaros, 1954 through 1966. The authors concluded that: 1) calving has been the only activity there--pregnant and recently parturient females with calf were in the large majority; 2) two groups of females, and odd-year group and an even-year group, each about the same size, 8 to 10 individuals, have aggregated at Yavaros in alternate years; 3) most, if not all, of the Yavaros females have been the same in each group--returning to their regular calving ground; 4) absent were mating activity and many pairs and trios of adults, which meant that mating was done on the west side of Cabo San Lucas or in the Magdalena-area in alternate years for each group. The authors noted no clear feeding activities. They described the physical features of the unusual, open-coast, calving site, 5 to 7 nautical miles south of Yavaros and concluded that the whales could have trans-located their calving activities there, when a town and breakwater were built and boat-traffic increased heavily at the landlocked bay of Yavaros, just to the north. Strangely, the gray whales at Yavaros showed no increase in numbers, 1954-1966, as have the larger populations on the west side of Baja California and at Reforma.

Shustov, A. P. [THE EFFECT OF COMMERCE ON THE STATE OF BERING SEA RIBBON SEALS.] Izvest. Tikhookeanskogo Nauch.-Issled. Inst. Rybn. Khoz. Okeanogr. 59: 173-178. 1965. [From Biol. Abstr. 48(13), 1967, from Referat. Zhur., Biol., 1966, no. 2I582. Transl. of Russian abstr.] WR 128: 28

Shustov, A. P. [THE FOOD OF RIBBON SEAL IN THE BERING SEA.] Izvest. Tikhookeanskogo Nauch.-Issled. Inst. Rybn. Khoz. Okeanogr. 59: 178-183. 1965. [From Biol. Abstr. 48(13), 1967, from Referat. Zhur., Biol., 1966, no. 2I583. Transl. of Russian abstr.] WR 128: 29

Shustov, A. P. [SOME BIOLOGICAL FEATURES AND REPRODUCTIVE RATES OF THE RIBBON SEAL (HISTRIOPHOCA FASCIATA) OF THE BERING SEA.] Izvest. Tikhookeanskogo Nauch.-Issled. Inst. Rybn. Khoz. Okeanogr. 59: 183-192. 1965. [From Biol. Abstr. 48(13), 1967, from Referat. Zhur., Biol., 1966, no. 2I581. Transl. of Russian abstr.] WR 128: 29

MAMMALS--OTHER GROUPS

Erz, Wolfgang. TOOTH ERUPTION AND REPLACEMENT IN BURCHELL'S ZEBRA, EQUUS BURCHELLI GRAY 1825. Arnoldia 1(22): 1-8, 4 figs. 18 Dec. 1964. WR 128: 29
Abstract: The order of tooth eruption and replacement in the Burchell's zebra, Equus burchelli Gray is described. These data were obtained from a study of 1,100 skulls at the National Museum, Bulawayo, Rhodesia. No definite foaling peak can be established from these data, and as a result no definite criteria for ageing can be given. The order of tooth eruption and replacement is similar to that of the domestic horse, Equus przewalski caballus (L.).

Groves, Colin P., Ferdinando Ziccardi, and Augusto Toschi. SULL'ASINO SELVATICO AFRICANO. [ABOUT THE AFRICAN WILD ASS.] Ricerche Zool. Appl. alla Caccia (Suppl.) 5(1): 1-30. Mar. 1966. Chapters in English and Italian with English and Italian summ. WR 128: 29
The taxonomy, morphology, habitat, distribution, behavior, ethology, ecology and zoogeography of Equus africanus.

Halloran, Art. IN THE BEGINNING THERE WERE LONGHORNS / AND THERE STILL ARE. Okla. Cowman 6(10): 8, 12, 42, illus. Nov. 1966. WR 128: 29
[Wichita Mountains Wildl. Refuge, Cache, Okla.] Included are tables of all known Wichita Refuge Texas longhorn weights and measurements.

Halloran, Arthur F. ORIGIN OF THE TEXAS LONGHORN HERD AT THE FORT NIOBRARA NATIONAL WILDLIFE REFUGE, NEBRASKA. Proc. Okla. Acad. Sci. 46: 233-234. 1966. WR 128: 29
[Wichita Mountains Wildl. Refuge, Cache, Okla.] Listing of the 26 longhorns transferred to Fort Niobrara.

Halloran, Arthur F. TEXAS LONGHORN CATTLE WEIGHTS AND MEASUREMENTS FROM WICHITA MOUNTAINS WILDLIFE REFUGE, OKLAHOMA. Proc. Okla. Acad. Sci. 46: 228-232. 1966. WR 128: 29
[Wichita Mountains Wildl. Refuge, Cache, Okla.]

BIRDS--GENERAL

Blaszyk, Paul. MODERNE LANDWIRTSCHAFT UND VOGELWELT. [MODERN AGRICULTURE AND BIRDS.] Ornithol. Mitteil. 19(4): 69-76. Apr. 1967. In German with English summ. WR 128: 29
[Marschweg 136, Oldenburg, Germany.] An account of the technical and economical revolution in agriculture during the past 20 years and its direct and indirect effects on birds.

Curry-Lindahl, Kai. ESQUISSE ÉCOLOGIQUE DES REPACES D'EUROPE. [ECOLOGICAL SURVEY OF THE BIRDS OF PREY OF EUROPE.] Reprint from Le Courrier de la Nature. 8 p., illus. Apr. 1964. In French. WR 128: 29
[Nordiska Museet & Skansen, Stockholm, Sweden.]

Gill, Frank B. OBSERVATIONS ON THE PELAGIC DISTRIBUTION OF SEABIRDS IN THE WESTERN INDIAN OCEAN. Proc. US Natl. Museum 123(3605): 1-33, 2 figs. 1967. WR 128: 30
[Univ. Mich., Ann Arbor.]

Haffer, Jürgen. SOME ALLOPATRIC SPECIES PAIRS OF BIRDS IN NORTHWESTERN COLOMBIA. Auk 84(3): 343-365, 6 figs. July 1967. WR 128: 30
[Mobile Oil Corp., Field Res. Lab., P.O. Box 900, Dallas, Texas.] Courtesy/ Paul A. Stewart.

Hudeck, Karel. ÚBERSICHT DER ORNITHOLOGISCH WERTVOLLSTEN GEBIETE DER TSCHECHOSLOWAKAI. [SURVEY OF VALUABLE ORNITHOLOGICAL CONTRIBUTIONS FROM CZECHOSLOVAKIA.] Ornithol. Mitteil. 17(4): 71-72. Apr. 1965. In German. WR 128: 30
[Lidická 79, Brno, Czechoslovakia.]

Krapivnyi, A. P. EXTRAPOLATION REACTIONS OF FRINGILLIDAE AND DOVES, THEIR MODELLING AND THE POSSIBILITY OF ETHOLOGICAL CLASSIFICATION OF BIRDS.] Zool. Zhur. 45(7): 1053-1066, illus. 1966. [From Biol. Abstr. 48(17), 1967. In Russian with English summ.] WR 128: 30
[Kharkov Pedagog. Inst., Kharkov, USSR.]

McCaskie, Guy, Richard Stallcup, and Paul DeBenedictis. THE DISTRIBUTION OF CERTAIN MIMIDAE IN CALIFORNIA. Condor 69(3): 310-311. May-June 1967. WR 128: 30
[San Diego, Calif.] Status of five species.--Courtesy/ Paul A. Stewart.

McCaskie, R. Guy, Richard Stallcup, and Paul DeBenedictis. THE STATUS OF CERTAIN FRINGILLIDS IN CALIFORNIA. Condor 69(4): 426-429. July-Aug. 1967. WR 128: 30
[San Diego, Calif.] Contains observations on regional status of 9 spp.--Courtesy/ Paul A. Stewart.

Moore, Jose. PROTECCIÓN DE LAS AVES SILVESTRES. [THE PROTECTION OF WILD BIRDS.] Anal. Soc. Rural Argent. 100(4/5): 61-65. 1966. [From Biol. Abstr. 48(12), 1967. In Spanish.] WR 128: 30

Temme, Manfred. DAS NATURSCHUTZGEBIET "SÜDSTRANDPOLDER" AUF NORDERNEY--NEUER BRUTPLATZ DER BARTMEISE (PANURUS BIARMICUS). [THE NATURE PRESERVE "SÜDSTRANDPOLDER" AT NORDERNEY--NEW BREEDING PLACE OF THE BEARDED TIT (PANURUS BIARMICUS).] Ornithol. Mitteil. 18(1): 2-8, illus. Jan. 1966. In German. WR 128: 30
[Nordseebad Norderney, Germany.]

von Toll, Eduard. ZUR GESCHICHTE DES VOGELSCHUTZES AUF DEN WAIKA-RIFFEN. [ON THE HISTORY OF BIRD PROTECTION OF THE WAIKA REEFS (BALTIC).] Ornithol. Mitteil. 19(1): 6-9. Jan. 1967. In German. WR 128: 30
[Holtland, Ostfriesland, Germany.] For the period 1907-1959.

Winterbottom, J. M. BIRDS AND AGRICULTURAL HABITATS. Proc. First Rhodesian Sci. Congress Bulawayo 16-20 May 1967. p. 100a-100b. 1967. WR 128: 30
[Univ. Cape Town, Cape Town, South Africa.] Abstract only.

BIRDS--TECHNIQUES

Bassini, Ettore. OSSERVAZIONI E RILIEVI SULLE CATTURE DEL TORDO (TURDUS PHILOMELUS L.) IN ALCUNE UCCELLANDE ITALIANE. [OBSERVATIONS AND REMARKS ON THE CAPTURE OF TURDUS PHILOMELUS L. AT SOME ITALIAN BIRD TRAPPING SITES.] Ric. Zool. Appl. Caccia 38: 1-40, [11] figs. 1964. In Italian with summaries in English, French and German. WR 128: 30

BIRDS--TECHNIQUES--Continued

Bezzel, Einhard. VOM "WOCHENENDFEHLER" BEI FELDORNITHOLOGISCHEN AUSWERTUNGEN. [ON "WEEKEND BIAS" IN FIELD ORNITHOLOGICAL EVALUATIONS.] Ornithol. Mitteil. 19(8): 169-173, 4 figs. Aug. 1967. In German with English summ. WR 128: 31
Forty-nine percent of the observations of extremely rare birds happened to be made on the weekend, 27% of them on Sunday; the percentages of discoveries of irregular visitors on weekends are 50 and 30. The "weekend bias" comes to a minimum during July and August, i.e. during holidaytime, and shows a maximum; in month with few church or bank holidays (February, November). Some examples show how the "weekend bias" can influence the graphs summing up the observations of a migrant. Ten-day periods contain a different number of full weekends. Therefore seven-day periods should be preferred.--From summ.

Johnston, Richard F. SEXUAL DIMORPHISM IN JUVENILE HOUSE SPARROWS. Auk 84 (2): 275-277. Apr. 1967. WR 128: 31
[Univ. Kans., Lawrence.] Throat color and the postocular spot varied widely in different specimens of Passer domesticus, but the two in combination could usually be used to sex the birds.--Courtesy/ Paul A. Stewart.

King, Warren B., George E. Watson, and Patrick J. Gould. AN APPLICATION OF AUTOMATIC DATA PROCESSING TO THE STUDY OF SEABIRDS, I. NUMERICAL CODING. Proc. US Natl. Museum 123(3609): 1-29, 10 figs. 1967. WR 128: 31
"The system described herein is in part descended from a simpler one developed by the Bureau [of Commercial Fisheries] to store and analyze its own bird observations. Coding used in the various fields of data in this pilot project is presented in this paper and details of the codes are given in the tables. Computer programming for the system is discussed by Creighton (in prep.). A full report on the results of the analysis of bird observation data from these cruises will be published by King, but the preliminary results suggest that ADP may be applicable to a cooperative international system of seabird observation, data storage, and analysis."

Martin, Elden W. AN IMPROVED CAGE DESIGN FOR EXPERIMENTATION WITH PASSERIFORM BIRDS. Wilson Bull. 79(3): 335-338, 2 figs. Sept. 1967. WR 128: 31
[Bowling Green State Univ., Bowling Green, Ohio.] Summary: Several new ideas were incorporated in the design of an experimental cage for passeriform birds. Detailed construction plans are included and some of the design features are discussed. Suggestions for routine application procedures of the cage are offered including the use of aluminum foil as a disposable medium to aid in quantitative excrement collection and handling.--Courtesy/ Paul A. Stewart.

Root, Richard B., and Ruth M. Yarrow. A PREDATOR-DECOY METHOD FOR CAPTURING INSECTIVOROUS BIRDS. Auk 84(3): 423-424. July 1967. WR 128: 31
A mounted screech owl (Otus asio) was placed near a mist net and recorded mobbing calls were played back. Success in netting the birds was greatest just after the mounted screech owl was removed rather than when it was still present near the net.--Courtesy/ Paul A. Stewart.

BIRDS--MORPHOLOGY & PHYSIOLOGY

Brush, Alan H. ADDITIONAL OBSERVATIONS ON THE STRUCTURE OF UNUSUAL FEATHER TIPS. Wilson Bull. 79(3): 322-327, 3 figs. Sept. 1967. WR 128: 31
[Univ. Conn., Storrs.] Courtesy/ Paul A. Stewart.

Creutz, Gerhard. WIEDERFUND EINES BERINGTEN KUCKUCKS (CUCULUS CANORUS) UNTER UNGEWÖHNLICHEN UMSTANDEN. (ERGEBNIS EINER SCHRECKMAUSER?). [A BANDED CUCKOO (CUCULUS CANORUS) FOUND AGAIN UNDER UNUSUAL CIRCUMSTANCES. RESULT OF MOLT CAUSED BY FRIGHT?] Vogelwarte 23(4): 309-310. 1966. [From Biol. Abstr. 48(15), 1967. In German.] WR 128: 31

Curry-Lindahl, Kai. PHYSIOLOGICAL ASPECTS OF BIRD MIGRATIONS BASED ON A TRANSEQUATORIAL MIGRANT, THE YELLOW WAGTAIL (MOTACILLA FLAVA). Grigore Antipa 5: 381-388, 1 fig. 1965. In English with Romanian and Russian summ. WR 128: 32

[Nordiska Museet & Skansen, Stockholm, Sweden.] Reprint of material earlier available: Publ. Univ. d'Elisabethville 6: 131-146. July 1963.

Hicks, David L. ADIPOSE TISSUE COMPOSITION AND CELL SIZE IN FALL MIGRATORY THRUSHES (TURDIDAE). Condor 69(4): 387-399, 4 figs. July-Aug. 1967. WR 128: 32

[Whitworth Coll., Spokane, Wash.] Conclusions: The nonfat components of adipose tissue in fall migrant thrushes are essentially stable, despite large changes in total body fat. Photomicrographs showing increases in cell size with increasing fat deposition together with data showing only a small accompanying increase in nonfat tissue components constitute direct evidence for hypertrophy of fat cells as a major mechanism in premigratory fattening. Observed significant differences in iodine numbers between species are attributed to basic species differences. Since no consistent pattern was evident, differences in iodine numbers between stages of fatness within a species are attributed to differences in food available to individuals that may have originated their migratory flights from a wide geographical area to the north.--Courtesy/ Paul A. Stewart.

Kontogiannis, John E. DAY AND NIGHT CHANGES IN BODY WEIGHT OF THE WHITE-THROATED SPARROW, ZONOTRICHIA ALBICOLLIS. Auk 84(3): 390-395, 2 figs. July 1967. WR 128: 32

[San Fernando Valley State Coll., Northridge, Calif.] The rate of weight gain was greatest during the first 2.5 hours of light, and the maximum weight was reached 7.5 hours after start of exposure to light. Birds exposed to forced exercise had greater weight gains during the day and greater losses during the night than birds not so exposed. The rate of weight loss was greatest during the first hours of darkness.--From summ. Courtesy/ Paul A. Stewart.

Labourne, Roxie C. BILATERAL GYNANDRISM IN AN EVENING GROSBEAK. Auk 84 (2): 267-272, 4 figs. Apr. 1967. WR 128: 32

[U.S. Natl. Museum, Washington, D.C.] Reports an evening grosbeak (Hesperiphona vespertina) with both male and female characteristics, including gonads.--Courtesy/ Paul A. Stewart.

McNeil, Raymond, and Aida Martinez. RETARDED OR ARRESTED CRANIAL DEVELOPMENT IN MYIORNIS ECAUDATUS. Wilson Bull. 79(3): 343-344. Sept. 1967. WR 128: 32

[Univ. Montreal, Montreal, Canada.] Both birds of a nesting pair of short-tailed pigmy-tyrants had incompletely ossified skulls.--Courtesy/ Paul A. Stewart.

Packard, Gary C. SEASONAL VARIATION IN BILL LENGTH OF HOUSE SPARROWS. Wilson Bull. 79(3): 345-346. Sept. 1967. WR 128: 32

[Clemson Univ., Clemson, S.C.] Adult house sparrows (Passer domesticus) collected in August had longer bills than those collected in October. "Wear to the bill is thought to be greater during late autumn and winter when the primary foods are seeds than it is in summer when a substantial part of the diet is soft-bodied insects."--Courtesy/ Paul A. Stewart.

Quay, W. B. COMPARATIVE SURVEY OF THE ANAL GLANDS OF BIRDS. Auk 84(3): 379-389, 5 figs. July 1967. WR 128: 32

[Univ. Calif., Berkeley.] Summary: The occurrences and characteristics of anal glands in birds were appraised by the study of serial histological sections of the anal-cloacal region from 86 specimens, representing 72 species and 42 families. These glands were found in most but not all groups of birds, and revealed differences in organization, structure, and staining which warrant further study. The glands appeared to have always originated from, and to

secrete onto, stratified squamous epithelium, which was sometimes keratinized, and variably external or internal in relation to the anal opening. The secretory cells and their products were well stained by the periodic acid-Schiff and the alcian blue techniques and were of the mucus-secreting type. The function(s) of the glands remain unknown although significance in the mechanics of internal fertilization in one species has been suggested.--Courtesy/ Paul A. Stewart.

Selander, Robert K., and Richard F. Johnston. EVOLUTION IN THE HOUSE SPARROW. I. INTRAPOPULATION VARIATION IN NORTH AMERICA. Condor 69(3): 217-258, 7 figs. + colored frontispiece. May-June 1967. WR 128: 33
[Univ. Kans., Lawrence.] Courtesy/ Paul A. Stewart.

Sibley, Charles G., and Alan H. Brush. AN ELECTROPHORETIC STUDY OF AVIAN EYE-LENS PROTEINS. Auk 84(2): 203-219, 7 figs. Apr. 1967. WR 128: 33
[Yale Univ., Newhaven, Conn.] Summary: The starch-gel electrophoretic patterns of the eye-lens proteins of over 1,400 specimens, representing more than 400 species of birds, were compared in a search for evidence of taxonomic relationships. Rapid denaturation of the lens proteins made it difficult to obtain trustworthy comparative data from specimens collected in the field. Fresh material, examined immediately after death, revealed that the eye-lens proteins of birds are probably more uniform throughout the class than, for example, the egg-white proteins. Although no taxonomic conclusions were reached on the basis of this study it should not be assumed that the lens proteins are lacking in taxonomically significant variation. However, in future comparative studies of the lens proteins it would be prudent to use only absolutely fresh material.--Courtesy/ Paul A. Stewart.

BIRDS--BEHAVIOR & MIGRATION

Amadon, Dean. GALÁPAGOS FINCHES GROOMING MARINE IGUANAS. Condor 69(3): 311. May-June 1967. WR 128: 33
[Am. Museum Nat. Hist., New York, N.Y.] The small ground finch (Geospiza fuliginosa) was observed picking ticks from the bodies of marine iguanas (Amblyrhynchus cristatus).--Courtesy/ Paul A. Stewart.

Babcock, Charles D. EVENING GROSBEAK ATTACKS HOUSE SPARROW. Auk 84(2): 263. Apr. 1967. WR 128: 33
[127 Jefferson St., Cattaraugus, N.Y.] A female evening grosbeak (Hesperiphona vespertina) captured a house sparrow (Passer domesticus) feeding at a bird feeder and flew away with the sparrow in its beak.--Courtesy/ Paul A. Stewart.

Baird, James. SOME COURTSHIP DISPLAYS OF THE GOLDEN-WINGED WARBLER. Wilson Bull. 79(3): 301-306, 5 figs. Sept. 1967. WR 128: 33
[Mass. Audubon Soc., Lincoln.] Summary: Three sexual displays previously unreported for the golden-winged warbler are described: gliding, courtship feeding, and a courtship display. The behavior of the male during the courtship display was similar to that of other parulids, involving such display components as plumage fluffing, crown raising, wing movements, etc.--Courtesy/ Paul A. Stewart.

Berndt, Rudolf, and Helmut Sternberg. DER BRUTORT DER EINJAHRIGEN WEIBLICHEN TRAUERSCHNAPPER (FICEDULA HYPOLEUCA) IN SEINER LAGE ZUM GEBURTSORT. [THE BREEDING LOCATION OF YEARLING FEMALE PIED FLYCATCHERS (FICEDULA HYPOLEUCA) IN RELATION TO THE BIRTHPLACE.] J. Ornithol. 107(3/4): 292-309. 1966. [From Biol. Abstr. 48(17), 1967. In German.] WR 128: 33

Bezzel, Einhard. FISCHADLER UND GROSSMÖWE BEUNRUHIGEN WASSERVÖGEL. [OSPREY (PANDION HALIAËTUS) AND HERRING GULL (LARUS ARGENTATUS) HARASS WATERFOWL.] Ornithol. Mitteil. 17(1): 12. Jan. 1965. In German. WR 128: 34
[Georgenstrasse 38/III, München, Germany.] Some 5000 mallards and gadwalls flushed from the water when a solitary osprey flew over. The diving ducks were less frightened than the dabblers. Gadwalls and shovellers were flushed by a herring gull.

Blume, Dieter, and Konrad Jeide. TRINKENDE UND BADENDE SPECHTE. [DRINKING AND BATHING WOODPECKERS.] Ornithol. Mitteil. 17(8): 154-156, 3 figs. Aug. 1965. In German. WR 128: 34

Boback, A. W. BEUNRUHIGT DER FISCHADLER (PANDION HALIAËTUS) WASSERVÖGEL? [DOES THE OSPREY FRIGHTEN WATERFOWL?] Ornithol. Mitteil. 17(1): 13, illus. Jan. 1965. In German. WR 128: 34
[Forstrassen 7, Radeberg/Sa., Germany.] Waterfowl are not frightened by osprey according to this author. The suggestion is made that the frightening effect is local and further evaluation is necessary.

Boswall, Jeffery. A DISCOGRAPHY OF PALEARCTIC BIRD SOUND RECORDINGS. British Birds 57 (Spec. Suppl.). 63 p., 4 pls. 1964. WR 128: 34
[British Broadcasting Corp., Bristol, England.]

Boswall, Jeffery. A CATALOGUE OF TAPE AND GRAMOPHONE RECORDS OF AUSTRALASIAN REGION BIRD SOUND. Emu 65(1): 65-74. Aug. 1965. WR 128: 34
[British Broadcasting Corp., Bristol, England.]

Boswall, Jeffery. NEW PALEARCTIC BIRD SOUND RECORDINGS IN 1964-65. British Birds 59: 27-37. Jan. 1966. WR 128: 34
[British Broadcasting Corp., Bristol, England.]

Brockway, Barbara F. THE INFLUENCE OF VOCAL BEHAVIOR ON THE PERFORMER'S TESTICULAR ACTIVITY IN BUDGERIGARS (MELOPSITTACUS UNDULATUS). Wilson Bull. 79 (3): 328-333. Sept. 1967. WR 128: 34
[Ohio State Univ., Columbus.] Summary: Data on surgically "devocalized" and sham-operated controls indicates that the gonadal activity of male budgerigars may be stimulated as a result of their performance of vocal display(s) rather than as a result of hearing such behavior by others. This may be the first demonstration of the self-stimulation of an individual's endocrine activity by his performance of a species-typical behavior which involves gonadotrophins and non-parental behavior. Since vocalizations are ethologically regarded as displays, the current thinking about the functions of displays may need expansion.--Courtesy/ Paul A. Stewart.

Collias, Nicholas E., and Elsie C. Collias. A QUANTITATIVE ANALYSIS OF BREEDING BEHAVIOR IN THE AFRICAN VILLAGE WEAVERBIRD. Auk 84(3): 396-411, 2 figs. July 1967. WR 128: 34
[Univ. Calif., Los Angeles.] It is suggested that the amount of energy consumed during a given activity provides a common basis for comparing the energy requirements of different kinds of behavior patterns. The life history of the African village weaverbird (Textor cucullatus graueri) is correlated with energy demands on the following points: fighting, territorial defense, copulation, egg laying, incubation, and feeding of young.--From summ. Courtesy/ Paul A. Stewart.

Davis, Peter. RAVENS' RESPONSE TO SONIC BANG. British Birds 60(9): 370-371. Sept. 1967. WR 128: 34
"Corvus corax."

Domaniewski, Janusz. MIGRATIONS OF BIRDS. Published for the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Central Institute for Scientific, Technical and Economic Information (Warsaw, Poland). OTS 63-11359. p. 1-42, 31 figs. 1964. Translated reprint from the Polish of "Wedrówki Ptaków" published by Państwowe Zakłady Wydawnictw Szkolnych (Warsaw). 50 p. 1958. [Available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va. Price 50¢.] WR 128: 35

Contents: The phenomenon of journeys; The study of migrations by bird banding; Altitude, speed and direction of journeys; and Bird migrations in exotic countries.

Emlen, Stephen T. MIGRATORY ORIENTATION IN THE INDIGO BUNTING, PASSERINA CYANEA. PART I: EVIDENCE FOR USE OF CELESTIAL CUES. Auk 84(3): 309-342, 15 figs. July 1967. WR 128: 35

[Cornell Univ., Ithaca, N.Y.] In 24 of 33 tests (73%), Zugunruhe orientation of indigo buntings was in the direction appropriate for the season. Individuals orienting under the night sky continued to orient correctly under artificial planetarium skies set for local conditions, reversed the direction of orientation when the north-south axis of the planetarium sky was reversed 180°, and lost all ability to orient when the stars were turned off and the dome diffusely illuminated.--Courtesy/ Paul A. Stewart.

Evans, Raymond D., and Carl W. Wolfe. NEST PARASITISM BETWEEN DUCK AND PHEASANTS. Nebr. Bird Rev. 35(2): 47. Apr. 1967. WR 128: 35

[Nebr. Game, Forestation & Parks Comm., Sutton.]

Ficken, Millicent S., and Robert W. Ficken. AGE-SPECIFIC DIFFERENCES IN THE BREEDING BEHAVIOR AND ECOLOGY OF THE AMERICAN REDSTART. Wilson Bull. 79 (2): 188-199. June 1967. WR 128: 35

[Univ. Md., College Park.] Summary: First-year male American redstarts are relatively uncommon as compared to older males as breeders in deciduous forests in the eastern and central United States. However in Maine they occur more frequently than older males in sub-optimal habitats. In New York first-year males arrive later than older males, are less aggressive and consequently at a disadvantage in competing with older males for territories in optimal habitats. They are also less successful in obtaining mates, at least partly due to their later arrival. A system is proposed to explain the interrelated effects of a female-like plumage, late arrival, lowered aggression, and use of sub-optimal habitats. It is suggested that delayed maturation, probably involving a lowered androgen level, evolved as a result of intense intraspecific competition in this species, and that selection acts against first-year males breeding in optimal habitats. Other passerines in which first-year males differ in plumage from older males also have high population densities and were probably subjected to similar selective pressures.--Courtesy/ Paul A. Stewart.

Ficken, Robert W., Millicent S. Ficken, and Elizabeth S. Hadaway. MOBBING OF A CHUCK-WILL'S-WIDOW BY SMALL PASSERINES. Auk 84(2): 266-267. Apr. 1967. WR 128: 35

[Univ. Md., College Park.] Mobbing of the chuck-will's-widow (Caprimulgus carolinensis) was initiated by tufted titmice (Parus bicolor), Carolina chickadees (P. carolinensis), and blue-gray gnatcatchers (Polioptila caerulea).--Courtesy/ Paul A. Stewart.

Flux, John E. C. BREEDING OF SONG THRUSHES AND BLACKBIRDS AT ST. ARNAUD, NELSON. Notornis 13(3): 142-149, 3 figs. Sept. 1966. WR 128: 35

[DSIR, Lower Hutt, New Zealand.]

Fulk, George W. THE GAPING RESPONSE OF NESTLING BANK SWALLOWS. Wilson Bull. 79(3): 344-345. Sept. 1967. WR 128: 35

[Univ. R.I., Kingston.] Nestling bank swallows (Riparia riparia) gaped in response to a change of lighting of the nesting burrow or to the approach of another swallow but not in response to a call from the parents.--Courtesy/ Paul A. Stewart.

Gehring, Walter. RADAR- UND FELDBBOBACHTUNGEN ÜBER DEN VERLAUF DES VOGELZUGES IM SCHWEIZERISCHEN MITTELLAND: DER TAGZUG IM HERBST (1957-1961). [RADAR AND FIELD OBSERVATIONS ON THE COURSE OF MIGRATION IN NORTHERN SWITZERLAND: THE DIURNAL AUTUMN MIGRATION (1957-1961).] Ornithol. Beobachter 60(2): 35-68, 25 figs. Apr. 1963. In German with English summ. WR 128: 36
[Univ. Zurich, Zurich, Switzerland.]

Goethe, F. AUSTERNIFISCHER (HAEMATOPUS OSTRALEGUS) MIT 36 JAHREN: ALTESTER FREILEBENDER RINGVOGEL. [HAEMATOPUS OSTRALEGUS, 36 YEARS OF AGE--THE OLDEST, TREE-LIVING BANDED BIRD.] Vogelwarte 25(4): 313. 1966. [From Biol. Abstr. 48(15), 1967. In German.] WR 128: 36

Goodwin, Derek. SOME POSSIBLE FUNCTIONS OF SUN-BATHING IN BIRDS. British Birds 60(9): 363-364. Sept. 1967. WR 128: 36

Grube, G. E. RED-HEADED WOODPECKER PREDATION ON STARLINGS. Nebr. Bird Review 35(2): 43-44. Apr. 1967. WR 128: 36
[Dana Coll., Blair, Nebr.] Two instances of predation upon eggs of starlings by red-headed woodpeckers.

Harengerd, Michael. UNGEWÖHNLICHER DURCHZUG DES KAMPFLÄUFERS (PHILOMACHUS PUGNAX). [UNUSUAL MIGRATION OF THE RUFF (PHILOMACHUS PUGNAX).] Ornithol. Mitteil. 18(8-9): 182-185, 2 figs. Aug.-Sept. 1966. In German. WR 128: 36
[Am Angelkamp 7, Münster-Angelmodde, Germany.]

Heckenlively, Donald B. ROLE OF SONG IN TERRITORIALITY OF BLACK-THROATED SPARROWS. Condor 69(4): 429-430. July-Aug. 1967. WR 128: 36
[Univ. Mich., Ann Arbor.] Vocal signals were more important in territorial defenses of the black-throated sparrow (Amphispiza bilineata) than visual or physical contacts.--Courtesy/ Paul A. Stewart.

Hilden, Olavi, and Pentti Linkola. HAVAINTOJA LINTUJEN PESIMISKAUDEN PAATTYMISVAIHEESTA. [THE END OF THE BREEDING SEASON OF BIRDS IN FINLAND.] Ornis Fennica 43(2): 54-60. 1966. [From Biol. Abstr. 48(13), 1967. In Finnish with German summ.] WR 128: 36
The termination of the breeding season was examined for several spp. in Lapland. The season ends about the same time each year; thus if it begins early it will last longer.

Holcomb, Larry C. GOLDFINCH ACCEPT YOUNG AFTER LONG AND SHORT INCUBATION. Wilson Bull. 79(3): 348. Sept. 1967. WR 128: 36
[Creighton Univ., Omaha, Nebr.] A female goldfinch (Spinus tristis) continued incubation 23 days, or until the eggs hatched which had been used to replace her original clutch.--Courtesy/ Paul A. Stewart.

Kirsch, Karl-Wilhelm. VERHALTEN VON BINNENLAND-VÖGLEN BEIM AUFTAUCHEN EINER RAUBMÖWE. [BEHAVIOR OF INLAND BIRDS UPON THE APPEARANCE OF GULLS.] Ornithol. Mitteil. 17(8): 161-162. Aug. 1965. In German. WR 128: 36

Klawitter, Jürgen, and Michael Lenz. BEMERKENSWERTER EINFLUG DER OHRENLERCHE (EREMOPHILA ALPESTRIS) IM BERLINER RAUM. [NOTEWORTHY MIGRATION OF THE SHORE LARK (EREMOPHILA ALPESTRIS) IN THE BERLIN AREA.] Ornithol. Mitteil. 19(2): 36-38. Feb. 1967. In German. WR 128: 36
[Wittelsbacher Strasse 6, Berlin, Germany.]

Kliebe, K. ZUR GESANGSDAUER DES FELDSCHWIRLS (LOCUSTELLA NAEVIA). [ON THE DURATION OF SONG IN THE GRASSHOPPER WARBLER (LOCUSTELLA NAEVIA).] Ornithol. Mitteil. 18(6): 108-110. June 1966. In German. WR 128: 36

Klopfer, Peter H. BEHAVIORAL STEREOTYPY IN BIRDS. Wilson Bull. 79(3): 290-300, 7 figs. Sept. 1967. WR 128: 37

[Duke Univ., Durham, N.C.] Summary: The foliage preferences of hand-reared tropical birds are relatively broad. Exposure to a particular type of foliage narrows these preferences. Previous experiments (Klopfer, 1965) had shown that certain temperate zone birds had narrower preferences whether wild-trapped or hand-reared. The motor patterns of tropical species were shown capable of considerable modification.--Courtesy/ Paul A. Stewart.

Kohlus, A. FRÜHJAHRSBBOBACHTUNGEN AM DÜMMERSEE. [SPRING OBSERVATIONS OF BIRDS AT DÜMMER SEE (LOWER SAXONY).] Ornithol. Mitteil. 19(4): 76-79. Apr. 1967. In German. WR 128: 37

[Weigandstrasse 90, Hamburg, Germany.] Annotated list.

Kramer, P. DER EISVOGEL (ALCEDO ATTHIS) AUF DEM ZUG IN UND DURCH DIE CAMARGUE. [THE KINGFISHER (ALCEDO ATTHIS) IN FLIGHT TO AND THROUGH CAMARGUE.] Vogelwarte 23: 164-172. 1966. [From Auk 84(2), 1967. In German with English summ.] WR 128: 37

Kruijt, J. P. THE DEVELOPMENT OF RITUALIZED DISPLAYS IN JUNGLEFOWL. Philosophical Trans. Royal Soc. London 251(B): 479-484. 1966. WR 128: 37

[Zool. Lab., Groningen, Netherlands.]

Kuhk, R. EIN FAST 29 JAHRE ALTER WESPENBUSSARD (PERNIS APIVORUS). [PERNIS APIVORUS, 29 YEARS OLD.] Vogelwarte 23(4): 312-313. 1966. [From Biol. Abstr. 48(15), 1967. In German.] WR 128: 37

Lavery, H. J. THE MOVEMENT PATH OF SOME WATERBIRDS IN NORTH QUEENSLAND. Queensland J. Agr. Animal Sci. 23(2): 323-327. 1966. [From Biol. Abstr. 48 (16), 1967.] WR 128: 37

Banding and recovery data support the existence of a prominent movement path from the eastern coast of Australia as far north as Cairns, thence to New Guinea by way of western Cape York Peninsula.

Mitchell, K. D. G. NOCTURNAL ACTIVITY OF CITY BLACKBIRD. British Birds 60 (9): 373-374. Sept. 1967. WR 128: 37

"Turdus merula."

Morton, Martin L. THE EFFECTS OF INSOLATION ON THE DIURNAL FEEDING PATTERN OF WHITE-CROWNED SPARROWS (ZONOTRICHIA LEUCOPHRYS GAMBELII). Ecology 48(4): 690-694, 3 figs. Summer 1967. WR 128: 37

[Univ. Wash., Seattle.] A morning decrease in feeding activities of wild flocks begins before the air temperature starts to increase and coincides with sunrise. There is a more pronounced decrease in feeding on warm, clear days than on cold, cloudy days. The feeding pattern of captives held outdoors is modified during exposure to direct insolation. Food intake is inhibited while the birds are in sunshine. Birds held indoors and exposed to levels of short-wave infrared radiation that are submaximal in the field eat the same as control birds when air temperature is a constant 20° C. When the air temperature is held at 7° C, however, the irradiated birds eat significantly less than the control birds.--From abstr. Courtesy/ Paul A. Stewart.

Myton, Becky A., and Robert W. Ficken. SEED-SIZE PREFERENCE IN CHICKADEES AND TITMICE IN RELATION TO AMBIENT TEMPERATURE. Wilson Bull. 79(3): 319-321. 1967. WR 128: 37

[Univ. Wis., Milwaukee.] Summary: Field experiments on seed-size choice revealed that tufted titmice preferred larger sunflower seeds and Carolina chickadees preferred smaller sunflower seeds as predicted from their difference in bill size. However, the chickadees showed a marked shift toward large seeds when the temperature was 32 F or below. Two mechanisms seemed to operate in this species: 1) a natural preference for small seeds, and 2) the modification of this preference toward one of increased efficiency under cold stress.--Courtesy/ Paul A. Stewart.

Owre, Oscar T. PREDATION BY THE CHUCK-WILL'S-WIDOW UPON MIGRATING WARBLERS. Wilson Bull. 79(3): 342. Sept. 1967. WR 128: 38
[Univ. Miami, Coral Gables, Fla.] A chuck-will's-widow, found dead, had a yellow throat (Geothlypis trichas) in its esophagus and a Cape May warbler (Dendroica striata) in its stomach.--Courtesy/ Paul A. Stewart.

Pfeifer, Sebastian. BEITRÄGE ÜBER DAS VERHALTEN EINER KLEINEN POPULATION DER WACHOLDERDROSSEL (TURDUS PILARIS) IM SCHWARZWALD. [CONTRIBUTIONS ON THE BEHAVIOR OF A SMALL POPULATION OF FIELDFARE (TURDUS PILARIS) IN THE BLACK FOREST.] Ornithol. Mitteil. 17(10): 199-202. Oct. 1965. In German. WR 128: 38
[Steinauer Strasse 33, Frankfort-Fechenheim, Germany.]

Plucinski, Alfons. BEOBACHTUNGEN AN EINEM NEUEN BRUTPLATZ DES RAUHFUSSKAUZES (AEGOLIUS FUNEREUS) IM HARZ. [OBSERVATIONS OF A NEW BREEDING LOCALITY FOR THE LONG-TAILED TIT (AEGOLIUS FUNEREUS) IN THE HARZ MOUNTAINS.] Ornithol. Mitteil. 18(3): 49-54, illus. Mar. 1966. In German. WR 128: 38
[Breslauer Strasse 2, Goslar, Germany.]

Radford, A. P. GROUND-PECKING REACTION OF ROBIN TO STUFFED BIRD. British Birds 60(9): 374. Sept. 1967. WR 128: 38
"Erithacus rubecula."

Reichelt, Gotthard. EIN MASSENSCHLAFPLATZ DER BACHSTELZE (MOTACILLA ALBA) AN EINER BELEBTEN STRASSENKREUZUNG IN ROM. [A ROOST OF THE WHITE WAGTAIL (MOTACILLA ALBA) AT A ROME STREET CROSSING.] Ornithol. Mitteil. 17(8): 168-170. Aug. 1965. In German. WR 128: 38
[Via Nemorense 100, Rome, Italy.]

Sanford, Richard C., and Stanley W. Harris. FEEDING BEHAVIOR AND FOOD-CONSUMPTION RATES OF A CAPTIVE CALIFORNIA MURRE. Condor 69(3): 298-302. May-June 1967. WR 128: 38
[Humboldt State Coll., Arcata, Calif.] The following points are discussed: surface behavior, feeding behavior, food consumption rates, weight loss during starvation, food consumption rate after starvation, and grit retention. "Uria aalge californica."--Courtesy/ Paul A. Stewart.

Schmid, G. WINTERFÜTTERUNG DER GREIFVÖGEL, EULEN UND SPECHTE. [WINTER FEEDING OF HAWKS, OWLS AND WOODPECKERS.] Ornithol. Mitteil. 17(11): 225-228. Nov. 1965. In German. WR 128: 38
[Adolf-Murthum-Strasse, Echterdingen, Germany.]

Schmid, Gottlob. ZUR WINTERFÜTTERUNG DER GREIFVÖGEL, EULEN UND SPECHTE. [ON WINTER FEEDING OF HAWKS, OWLS AND WOODPECKERS.] Ornithol. Mitteil. 18 (11): 224-229. Nov. 1966. In German. WR 128: 38
[Adolf-Murthum-Strasse, Echterdingen, Germany.]

Schmitz, J., and A. Middel. DIE ABHÄNGIGKEIT DES VOGELGESANGES VON DER HELLIGKEIT. [THE RELATIONSHIP OF BIRD SONG TO LIGHT INTENSITY.] Ornithol. Mitteil. 18(6): 111-114, 7 figs. June 1966. In German. WR 128: 38
"Passer domesticus, Parus major, Chloris chloris, Fringilla coelebs, and Streptopelia decaocto."

Smith, Susan M. A CASE OF POLYGAMY IN THE BLACK-CAPPED CHICKADEE. Auk 84 (2): 274. Apr. 1967. WR 128: 38
[Univ. Wash., Seattle.] One male Parus atricapillus had two mates on nests 100 yd apart.--Courtesy/ Paul A. Stewart.

Stefanski, Raymond A. UTILIZATION OF THE BREEDING TERRITORY IN THE BLACK-CAPPED CHICKADEE. Condor 69(3): 259-267, 3 figs. May-June 1967. WR 128: 38
[Univ. Toronto, Toronto, Ontario, Canada.] Establishment of the breeding territory was a gradual process. Average territory sizes of the pre-nesting and nest-building stages were 2.2 and 2.3 hectares, respectively. The birds

spent 42% of their time in territorial defense during the pre-nesting stage and 31% during the nest-building stage. When feeding nestlings, the adult birds used only 22% of the area used during nest-building.--From summ. Courtesy/ Paul A. Stewart.

Sudhaus, Walter. ZUR NAHRUNG DER HAUBENLERCHE (GALERIDA CRISTATA). [ON THE FEEDING HABITS OF THE CRESTED LARK (GALERIDA CRISTATA).] Ornithol. Mitteil. 18(7): 131-134. July 1966. In German. WR 128: 39
[Fliggendorfer Strasse 14, Kiel-Wellingdorf, Germany.] Tabulations by food item and month.

Swirski, Z. BIRD MIGRATIONS. Published for the U.S. Department of the Interior and the National Science Foundation, Washington, D.C., by the Scientific Publications Foreign Cooperation Center of the Central Institute for Scientific, Technical and Economic Information (Warsaw, Poland). OTS 63-11358. p. 1-105, illus. 1965. Translated reprint from the Polish of "Wedrówkach Ptaków." [Available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 39
Contents: Historical outline of bird migration research; The banding of birds; Radar in ornithological research; When, which way, how?; Orientation of birds during migration; Regularity of migrations, wintering sites; Irregular migrations and the extension of the geographical ranges; Directions and trails; Vertical migrations; Bird migrations in the light of systematic research; Winter sleep of birds?; and Migrations in the animal world and their causes.

Teager, C. W. BIRDS SUN-BATHING. British Birds 60(9): 361-362 + 7 figs. Sept. 1967. WR 128: 39

Thiede, Walther. VOM GESANG DES ROHRAMMERS (EMBERIZA SCHOENICLUS). [ON THE SONG OF THE REED BUNTING (EMBERIZA SCHOENICLUS).] Ornithol. Mitteil. 17 (8): 153-154. Aug. 1965. In German. WR 128: 39
[Holunderweg 21, Hamburg, Germany.]

Tomlinson, Jack T. SEDATIVES INTERFERE WITH WALKING MORE THAN FLYING. Wilson Bull. 79(2): 242-243. June 1967. WR 128: 39
[San Francisco State Coll., San Francisco, Calif.] Observations on behavior of western gulls (Larus occidentalis) and white-crowned sparrows (Zonotrichia leucophrys) when fed chloral hydrate.--Courtesy/ Paul A. Stewart.

von Gunten, Kurt. UNTERSUCHUNGEN AN EINER DORFGEMEINSCHAFT VON MEHL-SCHWALBEN, DELICHON URBICA. [INVESTIGATIONS OF SOME HOUSE MARTIN COLONIES.] Ornithol. Beobachter 60(1): 1-11, 4 figs. Feb. 1963. In German. WR 128: 39

von Lehmann, E. DREI INTERESSANTE NISTPLÄTZE DER SCHWANZMEISE (AEGITHALOS CAUDATUS). [THREE INTERESTING NESTING PLACES OF THE LONG-TAILED TITMOUSE (AEGITHALOS CAUDATUS).] Ornithol. Mitteil. 17(1): 10. Jan. 1965. In German. WR 128: 39
[Zool. Forschungsinst. & Museum A. Koening, Bonn, Germany.] One nest was in a wheel rut of a little-used woodland trail; another was in a blackberry bush and the third was on the ground beneath the bark of a fallen tree.

Vuilleumier, Francois. MIXED SPECIES FLOCKS IN PATAGONIAN FORESTS, WITH REMARKS ON INTERSPECIES FLOCK FORMATION. Condor 69(4): 400-404. July-Aug. 1967. WR 128: 39
[Univ. Mass., Boston.] On the evolution of flocking behavior.--Courtesy/ Paul A. Stewart.

White, C. A. NOCTURNAL SINGING BY BIRDS DISTURBED BY WARTIME GUNFIRE. British Birds 60(9): 372-373. Sept. 1967. WR 128: 39
"Erithacus rubecula, Garrulus glandarius, Parus major, and Sylvia atricapilla."

Winterbottom, J. M. FOOTNOTE ON BREEDING OF PARADISE FLYCATCHER. Ostrich 38(2): 133-134. June 1967. WR 128: 40
[Univ. Cape Town, Cape Town, South Africa.] Breeding seasons, clutch size, and nesting success of Tersiphone viridis.

BIRDS--MANUALS, FAUNAS, COMMUNITIES

Andrle, Robert F. BIRDS OF THE SIERRA DE TUXTLA IN VERACRUZ, MEXICO. Wilson Bull. 79(2): 163-187, 8 figs. June 1967. WR 128: 40
[Buffalo Museum Sci., Buffalo, N.Y.] An annotated list of 251 spp., including 55 spp. not previously recorded.--Courtesy/ Paul A. Stewart.

Carter, William A. ECOLOGY OF THE NESTING BIRDS OF THE McCURTAIN GAME PRESERVE, OKLAHOMA. Wilson Bull. 79(3): 259-272. Sept. 1967. WR 128: 40
[East Central State Coll., Ada, Okla.] The study area contained three topographic communities: river bottom, stream bottom, and upland. The river bottom supported the largest bird population of the three communities, 248 pairs and 36 spp. per 100 acres. The stream bottom community supported 128 pairs and 35 spp. The upland community supported 128 pairs and 35 spp. per 100 acres. The estimated bird population for the 13,300 acre area of virgin forest was 17,225 pairs of 56 spp.--Courtesy/ Paul A. Stewart.

Cowan, John B. BIRDS OF GRAY LODGE WATERFOWL MANAGEMENT AREA. Calif. Resources Agency Dept. Fish & Game. 8 p. [1967.] WR 128: 40
[Gridley, Calif.]

Dement'ev, G. P., N. A. Gladkov, Yu. A. Isakov, N. N. Kartashev, S. V. Kirikov, A. V. Mikheev, and E. S. Ptushenko. BIRDS OF THE SOVIET UNION. VOLUME IV. Published for the U.S. Department of the Interior and the National Science Foundation by the Israel Program for Scientific Translations (Jerusalem). TT 65-50100. ix + 683 p., 114 figs., 78 maps. 1967. Russian original published by Gosudarstvennoe Izdat. "Sovetskaya Nauka" (Moscow) in 1952. [Translation available from U.S. Dept. Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.] WR 128: 40
Species accounts of gallinaceous birds (Galliformes) and waterfowl (Anseriformes).

Diamond, Jared M., and John W. Terborgh. OBSERVATIONS ON BIRD DISTRIBUTION AND FEEDING ASSEMBLAGES ALONG THE RIO CALLARIA, DEPARTMENT OF LORETO, PERU. Wilson Bull. 79(3): 273-282. Sept. 1967. WR 128: 40
[Univ. Calif. Medical Center, Los Angeles.] "The relative abundance of 88 species in each of three distinct vegetational zones is given along with incidental notes and a description of two mixed assemblages of birds observed in feeding trees."--Courtesy/ Paul A. Stewart.

Erz, Wolfgang. BETRACHTUNGEN ZUR VOGELWELT DER NATURSCHUTZGEBIETE "VENNER MOOR" UND "WESTRUPER HEIDE". [OBSERVATIONS ON THE AVIFAUNA OF THE VENNER MOOR AND WESTRUPER HEIDE NATURE PROTECTION INSTITUTES.] Ornithol. Mitteil. 17(8): 163-168. Aug. 1965. In German. WR 128: 40
[Friedrichstrasse 85, Dortmund, Germany.]

Erz, Wolfgang. ORNITHOLOGISCHE UNTERSUCHUNGEN IN STÄDTEN POLENS. [ORNITHOLOGICAL OBSERVATIONS IN POLAND.] Ornithol. Mitteil. 17(7): 134-137, 2 figs. July 1965. In German. WR 128: 40

Harwin, R. M. A PRELIMINARY LIST OF THE BIRDS OF GWELO DISTRICT, RHODESIAN MIDLANDS. South African Avifauna Ser. Percy Fitzpatrick Inst. African Ornithol. no. 47. 43 p., 1 fig. 1967. Price 60¢. WR 128: 40

Hendricks, Bartlett. TWENTY-FIVE YEARS OF BERKSHIRE BIRDS. Mass. Audubon 51(4): 175-177. Summer 1967. WR 128: 41
"In the past twenty-five years thirty-six species of birds have been added to the record for Berkshire County, [Mass.], bringing the total to 298 species and sub-species, plus two hybrids."

Herrlinger, Eberhard. SOMMER- UND HERBSTBACHTUNGEN AM NEUSIEDLER SEE. [SUMMER AND AUTUMN (BIRD) OBSERVATIONS ON NEUSIEDLER LAKE (EASTERN AUSTRIA).] Ornithol. Mitteil. 17(6): 113-118. June 1965. In German. WR 128: 41
[Saarstrasse 18, Bad Godesberg, Germany.]

Hicks, David L., Eustorgio Mendez, and Horace Loftin. ADDITIONS TO THE AVIFAUNA OF PANAMÁ: THE PALM WARBLER AND THE CONNECTICUT WARBLER. Condor 69(3): 319-320. May-June 1967. WR 128: 41
[Univ. Ga., Athens.] Courtesy/ Paul A. Stewart.

Irwin, M. P. Stuart, and C. W. Benson. NOTES ON THE BIRDS OF ZAMBIA: PART IV. Arnoldia 3(8): 1-27. 31 Mar. 1967. WR 128: 41
Concluding part. [See WR 125: 38 and WR 126: 37 for earlier parts.] The four parts comprise an annotated list of 147 spp. of Zambian birds.

Jacoby, Harald. ZUR VOGELWELT DES BODENSEES. [ON THE AVIFAUNA OF LAKE CONSTANCE.] Ornithol. Mitteil. 17(11): 219-225, illus. Nov. 1965. In German. WR 128: 41
[Beyerlestrasse 22, Konstanz, Germany.]

Kobus, Dieter. DIE VOGELWELT DES FÖHRER VORLANDES. [THE AVIFAUNA OF FÖHR (NORTH FRISIAN ISLANDS) MUDFLATS.] Ornithol. Mitteil. 18(10): 195-198, illus. Oct. 1966. In German. WR 128: 41
[Burgweg 3, Oberbiel, Germany.]

McClure, H. Elliott. THE COMPOSITION OF MIXED SPECIES FLOCKS IN LOWLAND AND SUB-MONTANE FORESTS OF MALAYA. Wilson Bull. 79(2): 131-154, 7 figs., 1 pl. June 1967. WR 128: 41
[Migratory Animal Pathological Survey, APO, San Francisco, Calif.] Summary: Between January 1959 and June 1963 feeding flocks (bird waves) of mixed species of insectivores were under observation in Central West Malaya, 8 in a secondary forest at 150 feet altitude, 74 in lowland forest at 1,000 feet, and 80 in sub-montane forest at 2,000 feet. One hundred nine species were in association in these flocks, of which 20 were the most often encountered as nuclear or regularly attendant species. Five species of aegithinids, Aegithina viridissima, Chloropsis cochinchinensis, C. sonnerati, C. cyanopogon, Irena puella, and two campephagids Pericrocotus igneus and P. flammeus dominated the flocks. The timaliid Alcippe poiocephalus and sylviid Gerygone fusca were important wave "organizers" having conspicuous flock calls. The segments of waves recorded usually included about 10 species and 35 individuals, but much greater numbers were encountered. The average number of individuals per species varied with the species and season. Greatest number of waves, species and individuals were encountered between November and March. Waves flowed through the forest in definite patterns and had length, depth, and width. The species in the flocks tended to remain at certain levels within the canopy and position within the wave.--Courtesy/ Paul A. Stewart.

Munteanu, D. SCHITĂ AVIFAUNISTICĂ A BAZINULUI MONTAN AL BISTRITEI. [SURVEY OF THE AVIFAUNA OF THE MOUNTAINOUS BASIN OF THE BISTRITA (RIVER).] Anal. Stiin. Univ., Sect. 2A Biol. 11: 103-121. 1965. [From Auk 84(2), 1967. In Romanian with Russian and French summ.] WR 128: 41
Categorization of 197 spp. by habitat and zoogeographic origin.

Oelke, Hans. ERGÄNZUNGEN ZUR VOGELFAUNA VON SÜDTIROL. [SUPPLEMENT TO THE AVIFAUNA OF THE SOUTHERN TYROL.] Ornithol. Mitteil. 17(12): 248-249. Dec. 1965. In German. WR 128: 41
[Gunzelinstrasse 11, Peine, Germany.]

Oelke, Hans, and Wolfgang Winkel. BEITRÄGE ZUR VOGELWELT DER OSTPYRENÄEN. [CONTRIBUTIONS TO THE AVIFAUNA OF THE EAST PYRENEES.] Ornithol. Mitteil. 17 (6): 121-125. June 1965. In German. WR 128: 42
[Gunzelstrasse 11, Peine, Germany.]

Parmalee, Paul W. ADDITIONAL NOTEWORTHY RECORDS OF BIRDS FROM ARCHABOLOGICAL SITES. Wilson Bull. 79(2): 155-162. June 1967. WR 128: 42
[Ill. State Museum, Springfield.] Summary: Remains of seven species of birds found in archaeological sites in Iowa, Illinois, West Virginia, and Georgia which are now either extinct, rare, or extirpated in these states are discussed. Supplements to the known range of these species and their use by the Indian are presented; two bones of the fish crow from Indian sites in southwestern Illinois constitute the first record of this bird for that state. "Swallow-tailed kite, whooping crane, long-billed curlew, Carolina parakeet, snowy owl, ivory-billed woodpecker, common raven, and fish crow."--Courtesy/ Paul A. Stewart.

Pashinov, M. I. [BIRDS OF THE CONIFEROUS AND CONIFEROUS-MIXED FORESTS OF THE TEACHING AND EXPERIMENTAL FORESTRY FARM OF THE SIBERIAN TECHNOLOGICAL INSTITUTE.] Trudy Sibirsk. Tekhnol. Inst. 39: 207-218. 1964. [From Biol. Abstr. 48(13), 1967, from Referat. Zhur., Biol., 1966, no. 1I399. Transl. of Russian abstr.] WR 128: 42

Paulson, D. R. NEW RECORDS OF BIRDS FROM THE BAHAMA ISLANDS. Notul. Nat. no. 394. 15 p. 1966. [From Auk 84(2), 1967.] WR 128: 42
Records of about 60 spp.

Rolle, Francis J. NOTES ON BIRDS FROM SOME WEST INDIAN ISLANDS. Stahlia Misc. Pap. 7: 1-4, illus. 1966. [From Biol. Abstr. 48(13), 1967.] WR 128: 42
[Univ. Puerto Rico, Rio Piedras.]

Rowley, J. S. BREEDING RECORDS OF BIRDS OF THE SIERRA MADRE DEL SUR, OAXACA, MEXICO. Proc. Western Found. Vert. Zool. 1(3): 107-204. 1966. [From Auk 84(2), 1967.] WR 128: 42
This booklet, with maps and photographs in color and in half-tone, illustrating habitats and nests, gives information on the breeding of 108 species, including, for 95, descriptions of nests and many eggs. A variety of pertinent and often new data on breeding activity and other behavior is included. Enlarged testes in males are not sufficient evidence for the time or even the place of breeding, for in tropical birds, especially hummingbirds, males may be in breeding condition for much longer period than females.

Skead, C. J. ECOLOGY OF BIRDS IN THE EASTERN CAPE PROVINCE. Ostrich (Suppl. 7). 103 p., 5 figs. July 1967. WR 128: 42
[Univ. Cape Town, Cape Town, South Africa.] Contents: Area covered, Habitats of land birds in the Eastern Cape, Plants of exceptional importance, Veld types in the Eastern Cape, The district lists and their veld types, The movements of birds, Allocation of species to habitats, Numerical distribution of the species in the land habitats, Bird lists by habitats, Species list, Glossary of ecological terms, and Bibliography.

Storer, Robert W., and Walter W. Dalquest. BIRDS FROM THE SAVE RIVER AREA OF MOZAMBIQUE. Occas. Pap. Museum Zool. Univ. Mich. no. 652. p. 1-14. 30 June 1967. WR 128: 42
Annotated list of 148 spp. of birds based on collecting [140 spp.] and supplemented by observations.

Strawinski, S. DIE VOGELVERSTÄDTERUNG VOM ÖKOLOGISCHEN STANDPUNKT. [BIRD-URBANIZATION FROM AN ECOLOGICAL STANDPOINT.] Ornithol. Mitteil. 18(4): 72-74. Apr. 1966. In German. WR 128: 42
[Univ. Torun, Torun, Poland.] Fourteen biotopes are discussed.

Sudhaus, Walter. ORNITHOLOGISCHE BEOBACHTUNGEN IM APRIL AUF SARDINIEN. [ORNITHOLOGICAL OBSERVATIONS DURING APRIL IN SARDINIA.] Ornithol. Mitteil. 18 (5): 87-100. May 1966. WR 128: 43
[Flüggendorfer Strasse 14, Kiel-Wellingdorf, Germany.] Annotated list of 97 spp.

Sukhinin, A. N., and A. O. Tashliev. [AUTUMN CONFIGURATION OF THE AVIFAUNA OF THE KHAUZ KHAN RESERVOIR AND ITS SHORE REGION.] Izv. Akad. Nauk Turkm. SSR Ser. Biol. Nauk 2: 51-56. 1965. [From Biol. Abstr. 48(12), 1967. In Russian.] WR 128: 43

Szijj, Laszio J. NOTES ON THE WINTER DISTRIBUTION OF BIRDS IN THE WESTERN ANTARCTIC AND ADJACENT PACIFIC WATERS. Auk 84(3): 366-378, 3 figs. July 1967. WR 128: 43
[Calif. State Polytechnic Coll., Pomona.] Distribution of more than 20 spp. is correlated with sea-surface temperatures.--Courtesy/ Paul A. Stewart.

Tarboton, W. R. A LIST OF THE BIRDS RECORDED IN NORTHERN OVAMBOLAND & THE CENTRAL KUNENE VALLEY. South African Avifauna Ser. Percy Fitzpatrick Inst. African Ornithol. no. 49. 23 p. 1967. Price 30¢. WR 128: 43

Thompson, Charles F. NOTES ON THE BIRDS OF THE NORTHEAST CAPE OF ST. LAWRENCE ISLAND AND OF THE PUNUK ISLANDS, ALASKA. Condor 69(4): 411-419. July-Aug. 1967. WR 128: 43
[Ind. Univ., Bloomington.] Observations on 44 spp.--Courtesy/ Paul A. Stewart.

Vernon, C. J. BIRDS OF THE MATOPOS, RHODESIA. South African Avifauna Ser. Percy Fitzpatrick Inst. African Ornithol. no. 48. 24 p. 1967. Price 35¢. WR 128: 43

Walter, Harmut. WINTER AUF SARDINIEN. [WINTER IN SARDINIA.] Ornithol. Mitteil. 17(2): 25-33, 4 figs. Feb. 1965. In German. WR 128: 43
[Görlitzer Strasse 5, Bonn, Germany.] Annotated list of 63 spp. of Sardinian birds.

Werner, Johannes. DER VOGELBESTAND EINES FELDGEHÖLZES IN OSTTHÜRINGEN. [THE STATUS OF BIRDS IN A WOODLOT IN EAST THURININGIA.] Ornithol. Mitteil. 17(9): 181-184, 1 fig. Sept. 1965. In German. WR 128: 43
[Zillestrasse 2, Jena, Germany.]

Winterbottom, J. M. THE BIRDS OF THREE SALT-WATER HABITATS IN THE SOUTH WEST CAPE. Ostrich 38(2): 148-154. June 1967. WR 128: 43
[Univ. Cape Town, Cape Town, South Africa.] Summary: The bird faunas of rocky shores, sandy shores and lagoons of the South West Cape are compared, using the Coefficient of Community, $CC = 100C / n_1+n_2-C$. [Where C is the number of species in common, n_1 is the number in the smaller fauna and n_2 the number in the larger.] It is concluded that the three faunas are distinct, that of the lagoons being particularly so. Comments are made on individual species and the frequency of each in the three habitats listed and, where necessary, discussed.

BIRDS--POPULATIONS & FLUCTUATIONS

Cody, Martin L. THE CONSISTENCY OF INTRA- AND INTER-CONTINENTAL GRASSLAND BIRD SPECIES COUNTS. Am. Nat. 100(913): 371-376. 1966. [From Biol. Abstr. 48(12), 1967.] WR 128: 43
[Univ. Pa., Philadelphia.]

Fredga, K., and I. Frycklund. [THE RINGING ACTIVITY AT THE LEDSKÄR BIRD STATION IN 1957-1963.] Vår Fågelvärld 24: 193-217. 1965. [From Auk 84(2), 1967. In Swedish with English summ.] WR 128: 44

Jordan, Romulo, and Humberto Fuentes. LAS POBLACIONES DE AVES GUANERAS Y SU SITUACION ACTUAL. [THE POPULATIONS OF GUANO BIRDS AND THEIR PRESENT STATUS.] Inst. Mar. Peru (Callao) Inform. 10: 1-31, illus. 1966. [From Biol. Abstr. 48 (15), 1967. In Spanish.] WR 128: 44

Kees, Walter. BEOBACHTUNGEN AN MEHLSCHWALBEN (DELICHON URBICA) UND RAUCHSCHWALBEN (HIRUNDO RUSTICA) IM RAUM BEDBURG-ERFT. [OBSERVATIONS OF HOUSE MARTIN (DELICHON URBICA) AND SWALLOW (HIRUNDO RUSTICA) IN BEDBURG/ERFT (RHINELAND).] Ornithol. Mitteil. 18(6): 115-117, 1 fig. June 1966. In German. WR 128: 44
[Gerh. v. Brugh Strasse 26, Bedburg/Erft, Germany.] For the period 1956-1964.

Mörzer Bruijns, M. F. HOEVEEL VOGELPAREN BROEDEN ER IN UW GEMEENTE? [HOW MANY BREEDING PAIRS OF BIRDS ARE THERE IN YOUR REGION?] Vogeljaar 15(2): 321-326. 1967. In Dutch. WR 128: 44

Neub, Martin. DIE INVASION DES SEIDENSCHWANZES (BOMBYCILLA GARRULUS) 1965/1966 IN BADEN-WÜRTTEMBERG. [THE INVASION OF THE WAXWING (BOMBYCILLA GARRULUS) 1965/1966 IN BADEN-WÜRTTEMBERG.] Ornithol. Mitteil. 19(2): 25-31, illus. Feb. 1967. In German with English summ. WR 128: 44
[Olnhauser Strasse 10, Stuttgart-Rot, Germany.] Records totalling 34,000 waxwings--believed to be the largest invasion known for the Baden-Württemberg area.

Ouellet, Henri. THE DISTRIBUTION OF THE CERULEAN WARBLER IN THE PROVINCE OF QUEBEC, CANADA. Auk 84(2): 272-274, 1 fig. Apr. 1967. WR 128: 44
[McGill Univ., Montreal, Canada.] An account of recent spread northward and eastward of Dendroica cerulea.--Courtesy/ Paul A. Stewart.

Smith, Susan M. SEASONAL CHANGES IN THE SURVIVAL OF THE BLACK-CAPPED CHICKADEE. Condor 69(4): 344-359, 7 figs. July-Aug. 1967. WR 128: 44
[Univ. Wash., Seattle.] Until family break-up, survival of young was about 100%. Five young were produced by each pair. Adult losses did not occur steadily throughout the year; rather there was a sharp decline in population numbers at the time of change from flocking to territorial behavior in the spring. The decline presumably resulted from mortality, emigration, or both.--From summ. Courtesy/ Paul A. Stewart.

Snow, D. W. POPULATION CHANGES OF SOME COMMON BIRDS IN GARDENS. British Birds 60(8): 339-341, 1 fig. Aug. 1967. WR 128: 44
Five year levels for Turdus philomelos, T. merula, Erithacus rubecula, and Prunella modularis.

BIRDS--ECONOMICS, CONTROL, MORTALITY

Bruns, Herbert. AUSWIRKUNGEN DES STRENGEN WINTERS 1962/63 AUF DIE VOGELWELT MITTELEUROPAS. [EFFECTS OF THE SEVERE WINTER OF 1962/63 UPON THE AVIFAUNA OF CENTRAL EUROPE.] Ornithol. Mitteil. 17(4): 73-78. Apr. 1965. In German. WR 128: 44
[Postfach 169, Wiesbaden, Germany.] With a long bibliography.

Bruns, H. KÖNNEN VÖGEL INSEKTENKALAMITÄTEN VERHINDERN? [CAN BIRDS HALT INSECT OUTBREAKS?] Ornithol. Mitteil. 17(8): 170-171, 1 fig. Aug. 1965. In German. WR 128: 44
[Postfach 169, Wiesbaden, Germany.]

Eaton, Stephen W. RECENT TOWER KILLS IN UPSTATE NEW YORK. Kingbird 17(3): 142-146, 2 figs. July 1967. WR 128: 45

"During two months in the fall, from mid-August to mid-October, about 10,000 song birds a year are killed at night by flying into communication towers on the Allegheny Plateau. This is a conservative estimate based on tower kills at Colden in southern Erie Co., at various towers in Cattaraugus, Allegany and Steuben Counties, and at towers checked near Elmira and Syracuse."

Erz, Wolfgang. ZUM QUEL[E]A-PROBLEM IN AFRIKA. [ON THE QUELEA PROBLEM IN AFRICA.] Ornithol. Mitteil. 17(5): 101-102. May 1965. In German. WR 128: 45

Frevert, Tönnies. SPECHTSCHÄDEN AN KÜNSTLICHEN NISTHÖHLEN UND IHRE VERHÜTUNG. [WOODPECKER DAMAGE OF ARTIFICIAL NEST-BOXES AND ITS PREVENTION.] Ornithol. Mitteil. 17(12): 243-245, 2 figs. Dec. 1965. In German. WR 128: 45

Guarino, Joseph L., and Edward W. Schafer. MAGPIE REDUCTION IN AN URBAN ROOST. US F&WS, Spec. Sci. Rept.--Wildl. no. 104. ii + 5 p. June 1967. WR 128: 45

Abstract: From 80 to 85 percent of about 250 black-billed magpies (Pica pica hudsonia) in an urban roost were killed with poultry pellets treated with 2 percent 4-aminopyridine, a chemical frightening agent. Before death, birds exhibited typical distress reactions, but other magpies were attracted rather than repelled, as expected, by this behavior. Bait was exposed in metal troughs for 1.5 hours on 4 successive evenings. Four months later a second population of about 280 birds using the same roost was reduced 75 percent with pellets treated with 1 percent DRC-1339 (3-chloro-p-toluidine hydrochloride), a lethal agent. Bait was required only 1 evening, for 1.5 hours. One year later the population contained only 85 birds. Both chemicals were effective in reducing magpie numbers, but from the standpoint of hazards to mammals and number of treatments needed, DRC-1339 appears more suitable.

Haack, Wolfgang, and Klaus Puchstein. AUSWIRKUNGEN DES KÄLTEWINTERS 1962/63 AUF DEN BRUTVOGELBESTAND. [EFFECTS OF THE SEVERE WINTER OF 1962/63 ON BREEDING BIRDS. (CONTRIBUTIONS FROM EAST HOLSTEIN).] Ornithol. Mitteil. 17(2): 37-39. Feb. 1965. In German. WR 128: 45

Kroymann, B. ERFOLGREICHE ÜBERWINTERUNG DES GIRLITZES (SERINUS SERINUS) IN BADEN-WÜRTTEMBERG IM STRENGEN WINTER 1962/1963. [SUCCESSFUL OVER-WINTERING OF THE SERIN (SERINUS SERINUS) IN BADEN/WÜRTTEMBERG IN THE SEVERE WINTER OF 1962/63.] Ornithol. Mitteil. 17(11): 231-232. Nov. 1965. In German. WR 128: 45

[Hölderlinstrasse 1, Stuttgart, Germany.]

Minor, Karl. VERLUSTE IN DER VOGELWELT DURCH WITTERUNGSEINFLÜSSE IM BRUTJAHR 1961. [LOSSES OF BIRDS THROUGH THE INFLUENCE OF WEATHER IN THE BREEDING SEASON OF 1961.] Ornithol. Mitteil. 17(8): 157-160. Aug. 1965. In German. WR 128: 45

[Karlstrasse 15, Wiesbaden, Germany.]

Saul, E. K. BIRDS AND AIRCRAFT: A PROBLEM AT AUCKLAND'S NEW INTERNATIONAL AIRPORT. New Zealand Dept. Internal Affairs, Wildl. Publ. no. 91. p. 366-376, 6 figs. 1967. WR 128: 45

Reprint from J. Royal Aeronautical Soc. 71(677), May 1967. Summary: The bird hazard to aircraft at Auckland International Airport, Mangere, NZ (Lat 37°00'30" S, Long 174°47'30" E) is examined. Geographical features affecting the hazard are explained and the history of the hazard recounted, and the groups and component species of birds, their daily movement patterns and seasonal abundances discussed. The greatest potential danger is from the waders, but gulls are the greatest actual danger possibly because gulls live irregular, opportunistic lives in comparison with the strict, tide-governed existence of the waders. An analysis of the bird incident figures for a year tends to confirm this view, in spite of the comparative rarity of incidents. Measures taken or projected against the birds are reviewed. Special reference

is made to unorthodox methods--the provision of alternative high water roosting sites, experiments with a radio-controlled model simulating the hawk shape, and the use of gull corpses as scaring agents. While worthwhile reductions have been made to the hazard, continued work and constant vigilance is necessary.

Stoddard, Herbert L., Sr., and Robert A. Norris. BIRD CASUALTIES AT A LEON COUNTY, FLORIDA TV TOWER: AN ELEVEN-YEAR STUDY. Bull. Tall Timbers Res. Sta. no. 8. iii + 104 p., 26 figs. June 1967. WR 128: 46

Techniques of TV tower watching, the effect of weather or tower kills, the magnitude of tower losses, the losses of dead birds to predation, and an annotated list of the 170 spp. and 29,451 birds handled during the 11-year study are features of this report.

Thomson, Erik. DIE AUSBREITUNG DER AMSEL IN ESTLAND. [THE SPREAD OF THE BLACKBIRD (TURDUS MERULA) IN ESTONIA.] Ornithol. Mitteil. 18(8-9): 185-186, 1 fig. Aug.-Sept. 1966. In German. WR 128: 46

[Herderstrasse 1, Lüneberg, Germany.]

BIRDS--PARASITES & DISEASES

Brinck, P., A. Svedmyr, and G. Von Zeipel. MIGRATING BIRDS AT OTTENBY SWEDEN AS CARRIERS OF TICKS AND POSSIBLE TRANSMITTERS OF TICKBORNE ENCEPHALITIS VIRUS. Oikos 16: 88-99. 1965. [From Auk 84(2), 1967.] WR 128: 46

Studies of birds trapped at the Ottenby Bird Station on the island of Öland in the Baltic Sea showed that ticks are carried by numerous bird species. Infestation rates during autumn migration varied from zero to nine per cent. Virological and serological tests were essentially negative.

Chiriac, E. CONTRIBUTII LA CUNOASTERA HELMINTOFAUNEI PĂSĂRILOR DIN R.P.R. [CONTRIBUTION TO THE KNOWLEDGE OF THE HELMINTH FAUNA OF BIRDS IN ROMANIA.] An. Univ. Bucuresti Ser. Stiint. Nat. 12: 171-180. 1963. [From Auk 84(2), 1967. In Romanian with French and Russian summ.] WR 128: 46

Chiriac, Elena. CERCETARI ASUPRA PARAZITOFAUNEI PASARILOR IHTIOFAGE DIN DELTA DUNARII. [RESEARCH ON THE PARASITOFAUNA OF ICHTYOPHAGIC BIRDS IN THE DANUBE DELTA.] An. Univ. Bucuresti Ser. Stiint. Nat. 14: 137-153. 1965. [From Biol. Abstr. 48(17), 1967. In Romanian with Russian and French summ.] WR 128: 46

Fay, L. D. BOTULISM: A CAUSE OF BIRD MORTALITY IN THE GREAT LAKES. Mich. Dept. Conserv. Res. & Development Rept. no. 106. 5 p., mimeo. [1966.] WR 128: 46

[Rose Lake Wildl. Res. Center, East Lansing, Mich.]

Guozdev, E. V. [TREMATODES OF GAME BIRDS IN SOUTH KAZAKHSTAN.] Trudy Inst. Zool. (Alma-Ata) 16: 89-124. 1962. [From Auk 84(2), 1967. In Russian.] WR 128: 46

Macdonald, J. W., D. A. McMartin, K. G. Walker, M. Carins, and R. H. Dennis. PUFFINOSIS IN FULMARS IN ORKNEY AND SHETLAND. British Birds 60(9): 356-360. Sept. 1967. WR 128: 46

Summary: The host range of puffinosis is reviewed. An outbreak of a similar disease in fulmars Fulmarus glacialis on islands off the north coast of Scotland is described. The postmortem findings and unsuccessful transmission experiments are reported. The natural history of the disease is discussed and evidence is presented which suggests that the virus may overwinter in gulls Larus spp. and fulmars, providing foci of infection which perpetuate the annual epidemics in fledgling Manx shearwaters Puffinus puffinus on the islands of Skomer and Skokholm, Pembrokeshire. An appendix gives details of histological and virological examinations.

Maksimova, A. P. [TREMATODES OF WILD AQUATIC BIRDS IN THE TURGAY LAKES.] Trudy Inst. Zool. (Alma-Ata) 16: 125-134. 1962. [From Auk 84(2), 1967. In Russian.] WR 128: 47

Nir, Yehuda, Robert Goldwasser, Yehuda Lasowski, and Amiel Avivi. ISOLATION OF ARBOVIRUSES FROM WILD BIRDS IN ISRAEL. Am. J. Epidemiol. 86(2): 372-378, 1 fig. Sept. 1967. WR 128: 47

Summary: More than 2,600 bloods from wild birds captured in four well-defined study areas throughout Israel have been processed in search of arboviruses. Four virus strains were isolated of which three were tentatively identified as strains of West Nile virus and one as Sindbis virus. This is the first report of Sindbis virus isolation from any source in Israel. All four isolates were made from bloods of turtle doves (Streptopelia turtur) collected during September 1964 and August 1965 in the Rubin area in the coastal strip of Israel.

Oosthuizen, J. H. BLOOD PARASITES OF SOME RHODESIAN BIRDS. Proc. First Rhodesian Sci. Congress Bulawayo 16-20 May 1967. p. 66. 1967. WR 128: 47 [Univ. Pretoria, Pretoria, South Africa.] Abstract only.

Oshmarin, P. G. [SOME NEW GENERA AND SPECIES OF TREMATODES FROM BIRDS OF VIETNAM.] Zool. Zhur. 43: 652-661. 1964. [From Auk 84(2), 1967. In Russian with English summ.] WR 128: 47

Spasskaya, L. P. [CESTODES OF BIRDS OF TUVA. V. SPECIES FROM GALLIFORMES AND SOME RAPACIOUS BIRDS.] Acta Vet. Hung. 12: 423-444. 1962. [From Auk 84 (2), 1967. In Russian with German summ.] WR 128: 47

Of 296 galliform birds examined in the USSR, 46 were infected with 7 spp. of cestodes; of 73 falconiforms examined, 21 were infected with 10 spp.

Sultanov, M. A. [DISTRIBUTION OF HELMINTH FAUNA OF BIRDS IN THE UZBEK S.S.R.] Doklady Akad. Nauk Uzbek SSR 1961(9): 52-54. 1961. [From Auk 84(2), 1967. In Russian with Uzbek summ.] WR 128: 47

Youatt, W. G., and L. D. Fay. SURVEY FOR SALMONELLA IN WILD PHEASANTS AND TURKEYS IN MICHIGAN. Mich. Dept. Conserv., Res. & Development Rept. no. 87. 3 p., mimeo. Dec. 1966. WR 128: 47

Abstract: Fifty-seven wild pheasants and seventy-four wild turkeys were examined for the presence of salmonella bacteria, organisms which cause serious (often fatal) diseases in fowl, and which cause "food poisoning" in humans. No salmonella species were found in any of the birds.

GAME BIRDS--GENERAL

Collias, Nicholas E., and Elsie C. Collias. A FIELD STUDY OF THE RED JUNGLE FOWL IN NORTH-CENTRAL INDIA. Condor 69(4): 360-386, 7 figs. July-Aug. 1967. WR 128: 47

[Univ. Calif., Los Angeles.] The habitat of the red jungle fowl (Gallus gallus) is largely secondary forest caused by burning by man for purposes of grazing and agriculture. Maximum breeding density of red jungle fowl was about one bird/2.5 acres. The birds fed and visited water holes in the early morning and late afternoon. A wide variety of fruits and insects are used for food. The breeding behavior and vocal repertoire of the red jungle fowl in nature are similar to those of the domestic fowl. The major difference in behavior of the two is the greater wariness of the red jungle fowl.--From summ. Courtesy/ Paul A. Stewart.

QUAIL

Francis, William J. PREDICTION OF CALIFORNIA QUAIL POPULATIONS FROM WEATHER DATA. Condor 69(4): 405-410, 1 fig. July-Aug. 1967. WR 128: 48

[Ill. Nat. Hist. Surv., Urbana.] Summary: A method is presented by which the productivity (proportion of subadults in the fall population) of California quail in San Luis Obispo County, California, can be predicted from the age-ratio of females, and two weather parameters: (1) the soil moisture at the end of April computed by the Thornthwaite evapotranspiration and water-balance method, and (2) the total seasonal precipitation from September through April. Tests on independent data verify the predictive value of the method.--Courtesy/ Paul A. Stewart.

PHEASANTS

Nomsen, Richard C. SOME ASPECTS OF PHEASANT REPRODUCTIVE SUCCESS IN IOWA, 1948-1963. Proc. Iowa Acad. Sci. 71: 228-234, illus. 1965. [From Biol. Abstr. 48(12), 1967.] WR 128: 48

[Iowa State Conserv., Des Moines.]

GROUSE, PARTRIDGE, ETC.

Braun, Clait E., and William B. Willers. THE HELMINTH AND PROTOZOAN PARASITES OF NORTH AMERICAN GROUSE (FAMILY: TETRAONIDAE): A CHECKLIST. Avian Diseases 11(2): 170-187. May 1967. WR 128: 48

[Colo. State Univ., Fort Collins.] In all, 53 different genera of endo-parasites have been reported from Tetraonidae.

Cade, Tom J., and Gordon L. Maclean. TRANSPORT OF WATER BY ADULT SANDGROUSE TO THEIR YOUNG. Condor 69(4): 323-343, 7 figs. July-Aug. 1967. WR 128: 48

[Cornell Univ., Ithaca, N.Y.] The male sandgrouse (Pterocles namaqua) flies to water in the morning; after soaking his ventral feathers he returns to his young which remove the water from the feathers with a "stripping" motion of the beak. From 25 to 40 ml of water can be absorbed and held in the belly feathers of the male, and he thus should be able to transport 10 to 18 g of water for a distance of 20 miles. This method of water transport is made possible by a feather structure peculiar to Pterocles, and the water-carrying capability presumably makes it possible for the bird to inhabit arid regions otherwise unsuitable.--Courtesy/ Paul A. Stewart.

Hjorth, Ingemar. VÄDRETS INVERKAN PÅ ORRENS SPELAKTIVITET. [INFLUENCE OF ABIOTIC FACTORS UPON THE DISPLAY OF THE BLACK GROUSE (LYRURUS TETRIX).] Vår FågelvÄrld 25(4): 289-314, 2 figs. 1966. In Swedish with English summ. WR 128: 48

A statistical investigation of data from 1962-64 concerning the correlation of display activity of the black grouse with weather and ground conditions.

Irving, Laurence, George C. West, Leonard J. Peyton, and Simon Paneak. MIGRATION OF WILLOW PTARMIGAN IN ARCTIC ALASKA. Arctic 20(2): 77-85, 6 figs. June 1967. In English with French and Russian summ. WR 128: 48

Abstract: Willow ptarmigan (Lagopus lagopus) migrate southward in autumn through Anaktuvuk Pass in the Brooks Range of Alaska and move northward in late winter to their principal nesting grounds on the arctic slope. In the morphologically homogeneous population four categories were distinguished--adult and juvenile males, adult and juvenile females--month by month at three localities. Adult males preponderate in winter in their northern range, a large proportion of juvenile males winter at Anaktuvuk, and females preponderate in the southern wintering range. Each age-sex category moves according to its own program and flocks change composition.

Lindsay, Gerald. PRAIRIE CHICKENS DIE UNDER CRUSTED SNOW. Passenger Pigeon 29(1): 25-28, 1 fig. Spring 1967. WR 128: 49
Report of winter losses in 1932-33 in Iron County, Wis.

Short, Lester L., Jr. A REVIEW OF THE GENERA OF GROUSE (AVES, TETRAONINAE). Am. Museum Novitates no. 2289. 39 p., 4 figs. 24 Apr. 1967. WR 128: 49
[Am. Museum Nat. Hist., New York, N.Y.] Egg color and size, and the natal plumages of grouse were studied. The various genera and species of grouse were grouped according to these characters, and the groupings are similar for both characters. An examination of the tails of North American grouse clearly indicates that the number of rectrices is too variable to be taxonomically useful at the generic level. One species (Dendragapus obscurus) exhibits almost the entire range of variation in rectrix number for all grouse (16-22 rectrices, versus 14-22 for all grouse). In addition to these features, attention was also devoted to the juvenal plumage and definitive adult plumages.--From summ.

Weeden, Robert B. SEASONAL AND GEOGRAPHIC VARIATION IN THE FOODS OF ADULT WHITE-TAILED PTARMIGAN. Condor 69(3): 303-309, 1 fig. May-June 1967. WR 128: 49
[Dept. Fish & Game, Fairbanks, Alaska.] The leaves of Salix and Ranunculus, the blossoms of Dryas, fruits of Polygonum, and the leaves and seeds of sedges were common items of food in the crops of white-tailed ptarmigan (Lagopus leucurus) collected in 23 localities from Colorado to Alaska. In winter, ptarmigans in Colorado used mostly Salix buds and twigs; in Alaska, they used mostly Alnus catkins.--From summ. Courtesy/ Paul A. Stewart.

TURKEY

Jonas, Robert James. ECOLOGY AND MANAGEMENT OF MERRIAM'S TURKEY IN THE LONG PINES, SOUTHEASTERN MONTANA. Ph.D. thesis, Univ. Mich. 129 p. 1964. [From Dissertation Abstr. 27(12B), 1967.] WR 128: 49
A sixteen-month field study during the three-year period 1961-63 was conducted to obtain information on movements, population characteristics, habitat use, life history and management of the introduced Merriam's turkey (Meleagris gallopavo merriami).

Neider, David. THE WILD TURKEY IN IDAHO. Idaho Wildl. Rev. 20(1): 3-7, illus. July-Aug. 1967. WR 128: 49
A summary of the successful stockings of Merriam's wild turkey made during 1962-67.

Williams, Lovett E., Jr. ERYTHRISM IN THE WILD TURKEY. Wilson Bull. 79(2): 239-240. June 1967. WR 128: 49
[Game & Freshwater Fish Comm., Gainesville, Fla.] A brownish red specimen of turkey (Meleagris gallopavo) was collected in Florida.--Courtesy/ Paul A. Stewart.

DOVES & PIGEONS

Franks, Edwin C. THE RESPONSES OF INCUBATING RINGED TURTLE DOVES (STREPTOPELIA RISORIA) TO MANIPULATED EGG TEMPERATURES. Condor 69(3): 268-276, 7 figs. May-June 1967. WR 128: 49
[Western Ill. Univ., Macomb.] Summary: The eggs of caged ringed turtle doves were replaced with artificial eggs through which temperature-controlled water was pumped. Data were gathered on the responses of the incubating doves to the egg temperatures. The immediate reaction to a newly created abnormal egg temperature is often the adjusting of the contact between the eggs and the skin of the bird. After several minutes gular-flutter may occur if the egg temperature is high, or shivering and elevation of feathers if it is low,

indicating that the body temperature has probably been affected by egg temperature. Incubation persisted at all manipulated egg temperatures between -4° and 62° C, even in one instance when the clutch was maintained warmer than body temperature for 13 days and in another when the eggs were near freezing for 39 hours. Therefore, the temperature of the eggs is not an immediate cause of incubation behavior.--Courtesy/ Paul A. Stewart.

Knisley, Julian O., Jr., and Carlton M. Herman. HAEMOPROTEUS, A BLOOD PARASITE, IN DOMESTIC PIGEONS AND MOURNING DOVES IN MARYLAND. Chesapeake Sci. 8(3): 200-202. Sept. 1967. WR 128: 50

[Patuxent Wildl. Res. Center, Laurel, Md.] Abstract: The occurrence of Haemoproteus in pigeons throughout the world and in mourning doves in the United States is reviewed. Haemoproteus has previously been reported only once from pigeons in Maryland. During this study it was found in all of 18 pigeons from one area but in none of 12 from an adjacent area. No infections were found in 90 Maryland mourning doves. All of the 10 mourning doves from Florida were infected whereas 60 nestlings from Texas and Mississippi had no parasites. None was found in 358 nestling white-winged doves from Texas.

Miller, Sheila J. NEST BUILDING ACTIVITY IN THE RING DOVE (STREPTOPELIA RISORIA): EFFECTS OF THE PRESENCE OF A NEST ON BUILDING ACTIVITY AND SUBSEQUENT SUCCESS OF THE CYCLE. Ph.D. thesis, Rutgers State Univ. 133 p. 1966. [From Dissertation Abstr. 27(12B), 1967.] WR 128: 50

Pfeifer, Sebastian. WANDERBEWEGUNGEN BEI DER TÜRKENTAUBE (STREPTOPELIA DECAOCTO). [MIGRATION MOVEMENTS OF THE COLLARED TURTLE DOVE (STREPTOPELIA DECAOCTO).] Ornithol. Mitteil. 18(4): 69-70. Apr. 1966. In German. WR 128: 50

WATERFOWL

Antikainen, E. O. ERAIDEN RIISTAVEDEN EUTROFISTEN JARVIEN VESILINNUSTON KOOSTUMUKSESTA. [ON ABUNDANCE AND DOMINANCE OF WATERFOWL IN EUTROPHIC LAKES AT RIISTAVESI IN NORTHERN SAVO.] Ornis Fenn. 43(3-4): 124-130. 1966. [From Biol. Abstr. 48(15), 1967. In Finnish.] WR 128: 50

Bezzel, Einhard. VERGLEICHENDE BEOBACHTUNGEN ÜBER DIE NESTSTANDSANSPRÜCHE EINIGER ENTENARTEN. [COMPARATIVE OBSERVATIONS UPON THE NESTING REQUIREMENTS OF SOME WATERFOWL SPECIES.] Ornithol. Mitteil. 19(5): 101-103. May 1967. In German with English summ. WR 128: 50

Nests of Anas platyrhynchos, A. strepera, Aythya ferina and Aythya fuligula were compared. The comparison of the four species breeding in the same biotope reveals that differences between dabbling and diving ducks seem to be unimportant.--From summ.

Blaker, D. AN OUTBREAK OF BOTULINUS POISONING AMONG WATERBIRDS. Ostrich 38(2): 144-147. June 1967. WR 128: 50

[Univ. Cape Town, Cape Town, South Africa.] Summary: Numbers of birds dying near Cape Town were found to contain a bacterial exotoxin, probably of Clostridium botulinum Type C. The prevailing conditions, and symptoms of affected birds are described. Figures on the percentage mortality of 26 species were obtained and it was found that when the presumed distribution of the toxin was taken into account, very high and very low values could mostly be interpreted in terms of the species' different feeding habits.

Boswall, Jeffery. VOICE RECORDINGS OF THE ANATIDAE. Twelfth Ann. Rept. Wildfowl Trust. p. 147-150. 1961. WR 128: 50

[British Broadcasting Corp., Bristol, England.]

Boswall, Jeffery. ADDITIONAL VOICE RECORDINGS OF THE ANATIDAE. Fourteenth Ann. Rept. Wildfowl Trust. p. 137-140. 1963. WR 128: 51
[British Broadcasting Corp., Bristol, England.]

Chamberlain, E. B., and C. F. Kaczynski. PROBLEMS IN AERIAL SURVEYS OF WATERFOWL IN EASTERN CANADA. US F&WS, Spec. Sci. Rept.--Wildl. no. 93. iii + 21 p., 5 figs. Nov. 1965. WR 128: 51
[Migratory Bird Populations Sta., Laurel, Md.] Abstract: Experimental surveys of waterfowl breeding populations in eastern Canada have been conducted intermittently since 1949 to develop a procedure for making reliable estimates of breeding populations and production of black ducks and Canada geese in this region. This report reviews in detail the black duck breeding population surveys. The vastness of the breeding range precludes complete coverage; even the amount of sampling required for sound predictions is a major consideration. Several approaches to stratified sampling failed to produce a useful plan. Variations in phenology within the survey area appear to be a major factor in developing a reliable sampling plan; a method that takes these variations into account is presented. Analysis of data from 4 years gave trends in breeding population size that agreed generally with trends in corresponding winter population data; previous interpretation methods did not produce this agreement.

Enkelaar, H., and T. Lebret. DE SEIZOENSPREIDING VAN GEBOORTE-DATA BIJ DE BERGEEND, TADORNA TADORNA, IN ZUIDWEST-ZEELAND. [THE SEASONAL DISTRIBUTION OF HATCHING DATES OF THE SHELDUCK IN THE SOUTHWEST OF THE PROVINCE OF ZEELAND, THE NETHERLANDS.] Limosa 39(4): 182-186, 1 fig. 1966. In Dutch with English summ. WR 128: 51
The seasonal distribution of hatching dates of shelduck is compared with that of the mallard (Anas platyrhynchos), described by Eygenraam (1957). The breeding of the shelduck appears to occur much later and it lasts shorter. The significance of this may be that ducklings of the former species and their food are much more dependent on warm weather than those of the latter. Their habitat is marine and cover is almost absent, while mallard ducklings are as a rule living in marsh vegetation of some density.--From summ.

Godin, Alfred J. TEST OF GRIT TYPES IN ALLEVIATING LEAD POISONING IN MALLARDS. US F&WS, Spec. Sci. Rept.--Wildl. no. 107. ii + 9 p. June 1967. Available from Supt. Documents at 15¢. WR 128: 51
[256 State Office Bldg., Hartford, Conn.] Abstract: Mallard ducks (Anas platyrhynchos) were given 0, 2, or 4 No. 6 lead shot in combination with 4 grit treatments; no grit, coarse sand, mica granite, and crushed oystershell. Each combination was replicated three times. Ducks were maintained on a diet of whole corn. An analysis of variance indicated no significant differences in mortality in relation to grit type, but a significant difference (at 0.05 level) in mortality between the lead shot doses. Oystershell grit apparently reduced mortality of ducks dosed with 4 shot but not to a degree statistically significant. In all treatments, mortality was closely associated with shot retention. Ducks retaining shot for 2 weeks usually died.

Kuhk, Rudolf, and Josef Szijj. WOLLMATINGER RIED UND ERMATINGER BECKEN SCHUTZBEDÜRFTIGE WASSERVOGEL-GEBIETE AN DER DEUTSCH-SCHWEIZERISCHEN GRENZE. [WOLLMATINGER MARSH AND ERMATINGER BASIN (DEPARTMENT FOR WATERFOWL IN NEED OF PROTECTION ON THE GERMAN-SWISS BOUNDARY).] Ornithol. Mitteil. 19(3): 47-50. Mar. 1967. In German. WR 128: 51
[Möggingen, Vogelwarte Radolfzell, Germany.]

Locke, L. N., and L. T. Young. ASPERGILLOSIS IN A COMMON LOON (GAVIA IMMER). Bull. Wildl. Disease Assoc. 3: 34. Jan. 1967. WR 128: 51
[Patuxent Wildl. Res. Center, Laurel, Md.]

Lokemoen, John T. FLIGHT SPEED OF THE WOOD DUCK. Wilson Bull. 79(2): 238-239. June 1967. WR 128: 52

[N. Prairie Wildl. Res. Center, Jamestown, N. Dak.] Speeds were recorded from 39 to 55 mph. and averaged 47.1.--Courtesy/ Paul A. Stewart.

Manuwal, David A. OBSERVATIONS ON A LOCALIZED DUCK SICKNESS IN THE DELTA MARSH: SUMMER, 1964. Wilson Bull. 79(2): 219-222. June 1967. WR 128: 52

[Univ. Mont., Missoula.] Summary: An isolated outbreak of duck sickness was studied in the Delta Marsh, Manitoba. Evidence suggests that the bacterium Clostridium botulinum (Type C) was responsible for the deaths of 885 birds found at 22 Bay. The deaths were closely associated with fluctuating water levels. The ducks found most numerous in the kill were the pintail, blue-winged teal, mallard. Among the ducks represented, a large proportion (76:24) were drakes; however, for juvenile birds, a nearly perfect 50:50 ratio existed. Other species, including shorebirds, gulls, terns, herons, grebes, coots, and marsh hawks were found sick.--Courtesy/ Paul A. Stewart.

Martinson, R. Kahler, and Charles J. Henny. RETENTION OF EXTRA-WIDE, LOCK-ON, AND REGULAR BANDS ON WATERFOWL. US F&WS, Spec. Sci. Rept.--Wildl. no. 108. iv + 19 p., 1 fig. Aug. 1967. WR 128: 52

[Migratory Bird Populations Sta., Laurel, Md.] Abstract: In tests of three types of bands -- extra-wide bands, lock-on bands, and regular U.S. Fish and Wildlife Service bands -- little difference was noted in the retention qualities of the three types on waterfowl. Therefore, there appeared to be no advantage in using either the extra-wide or the lock-on type of band rather than the regular band now in use by waterfowl banders on this continent. Waterfowl banded with two bands provided recovery data that were difficult to analyze but suggested that it might be worthwhile to identify banded birds with another type of mark and evaluate the retention of bands through subsequent recapture of the birds.

Martinson, R. Kahler, and Charles F. Kaczynski. FACTORS INFLUENCING WATERFOWL COUNTS ON AERIAL SURVEYS, 1961-66. US F&WS, Spec. Sci. Rept.--Wildl. no. 105. iv + 78 p., 3 figs. June 1967. WR 128: 52

[Migratory Bird Populations Sta., Laurel, Md.] Abstract: Surveying of selected transects from the air and from the ground has been used since 1959 to determine the proportion of waterfowl, by species, that are observed by aerial crews. This method attempts to resolve obvious biases in aerial indexes relating to habitat differences, seasonal differences, aerial crew changes, etc. Assumptions in this method of correction are that (1) the ground crew observed substantially all waterfowl present and (2) the selected comparison transects adequately represent surrounding transects to which the correction is to be applied. This report, utilizing data of 1961 to 1966, reviews the necessity for air:ground correction and evaluates the procedure as a solution to aerial index biases; problems apparent are lack of representativeness of air:ground transects and inadequate numbers of transects. Lack of representativeness appears in population density and in species composition differences between air:ground and operational transects. The degree to which the number of air:ground transects are sufficient to give good estimates of air:ground ratios varies according to areas and according to species. Recommendations to improve the air:ground technique are: (1) make two daily surveys of one aerial pass each, at an interval of at least 2 hours, in the same direction and at the same time as the adjacent operational transects are surveyed; (2) make ground counts the day before or day after aerial surveys; (3) lay out all air:ground comparison transects in the same direction (west-east) as the operational transects; and (4) match new or relocated transects as nearly as possible to density and species composition of the survey stratum or area they represent.

Mester, H. WANN BEGINNT DIE "VERLOBUNGSZEIT" DER GÄNSESÄGER? [WHEN DOES THE MERGANSER BEGIN COURTSHIP?] Ornithol. Mitteil. 17(2): 34-35, 1 fig. Feb. 1965. In German. WR 128: 52

[Im Rüschenfeld, Roxel, Germany.]

Nuorteva, Pekka, and Tapani Ormio. THE INSECT FAUNA OF THE NESTS OF THE GOLDENEYE, BUCEPHALA CLANGULA (L.). Ann. Ent. Fenn. 31(3): 208-219, 1 fig. 1965. WR 128: 53
[Univ. Helsinki, Helsinki, Finland.] Notes on the 22 spp. of insects found.

Ponomarev, G. [LET US RAISE THE ABUNDANCE OF GOLDENEYE.] Okhota & Okhotnich'e Khoz. 1965(7): 15. 1965. [From Biol. Abstr. 48(13), 1967, from Referat. Zhur., Biol., 1966, no. 1I606. Transl. of Russian abstr.] WR 128: 53
The "Obskoi" reserve in the Altai Territory has achieved an increase in the abundance of goldeneye by placing beehives in tree trunks. Recommendations for improving and increasing suitable nesting sites for goldeneye are given.

Rogers, John P. FLIGHTLESS GREEN-WINGED TEAL IN SOUTHEAST MISSOURI. Wilson Bull. 79(3): 339. Sept. 1967. WR 128: 53
[Gaylord Memorial Lab., Puxico, Mo.] A molting female green-winged teal (Anas carolinensis) was trapped on 25 September 1963.--Courtesy/ Paul A. Stewart.

Siegfried, W. R. I. EFFECTS OF STARVATION ON THREE SPECIES OF ANATIDAE--ALOPOCHEN AEGYPTIACUS (L.), ANAS UNDULATA DUBOIS AND ANAS SMITHI (HARTERT). II. OBSERVATIONS ON THE POST-EMBRYONIC DEVELOPMENT OF THE EGYPTIAN GOOSE ALOPOCHEN AEGYPTIACUS (L.) AND THE REDBILL TEAL ANAS ERYTHRORHYNCHA GMELIN. III. NESTING BEHAVIOUR OF THE REDBILL TEAL ANAS ERYTHRORHYNCHA GMELIN. Cape of Good Hope, Dept. Nat. Conserv., Investigational Rept. no. 2. p. 1-24. 1962. WR 128: 53
Three brief papers.

Stewart, Paul A. WOOD DUCK DUCKLINGS CAPTURED BY BULLFROGS. Wilson Bull. 79(2): 237-238. June 1967. WR 128: 53
[Agr. Res. Serv., USDA, Oxford, N.C.] Two wood duck ducklings (Aix sponsa) were captured by bullfrogs (Rana catesbeiana). The ducklings were on a pond with fish hooks and lines attached to their legs.--Author's abstr.

Stewart, Paul A. DISGORGING OF FOOD BY WOOD DUCKS. Wilson Bull. 79(3): 339-340. Sept. 1967. WR 128: 53
[Agr. Res. Serv., USDA, Oxford, N.C.] When confined overnight, wild-trapped wood ducks (Aix sponsa) disgorged food in excess of capacity as the food increased in volume from imbibition.--Author's abstr.

CRANES, RAILS, SHOREBIRDS

Brooks, William S. FOOD AND FEEDING HABITS OF AUTUMN MIGRANT SHOREBIRDS AT A SMALL MIDWESTERN POND. Wilson Bull. 79(3): 307-315. Sept. 1967. WR 128: 53
[Ripon Coll., Ripon, Wis.] Twenty species of shorebirds were classified into three groups according to feeding habits as follows: large species feeding exclusively on the shore (4 spp.), small or short-legged species feeding on or near the shore or on algal mats (10 spp.), and large species feeding chiefly in belly-deep water (6 spp.). All species showed dietary selectivity, thus minimizing competition. Species selecting the same food usually avoided competition by feeding in separate sites.--Courtesy/ Paul A. Stewart.

Brossett, A., and A. Olier. LES ILES CHAFFARINES, LIEU DE REPRODUCTION D'UNE IMPORTANTE COLONIE DE GOELANDS D'AUDOUIN, LARUS AUDOUINI. [THE CHAFARINA ISLANDS, REPRODUCTION SITE OF AN IMPORTANT COLONY OF SEAGULLS, LARUS AUDOUINI.] Alauda Rev. Int. Ornithol. 34(3): 187-190. 1966. [From Biol. Abstr. 48(15), 1967. In French.] WR 128: 53
[Mus. Nat. Hist. Natur., Brunoy, France.]

Deppe, Hans-Joachim. ZWERGSEESCHWALBE (STERNA ALBIFRONS) IM GEBIET DER MÜRITZ. [THE LITTLE TERN (STERNA ALBIFRONS) IN THE MÜRITZ LAKE DISTRICT.] Ornithol. Mitteil. 17(7): 142. July 1965. In German. WR 128: 54

Dusi, Julian L. MIGRATION IN THE LITTLE BLUE HERON. Wilson Bull. 79(2): 223-235, 3 figs. June 1967. WR 128: 54
[Auburn Univ., Auburn, Ala.] Little blue herons (Florida caerulea) disperse in all directions from their hatching and breeding places, tending to follow major waterways. Later there are southward autumn movements and northward spring movements. Birds in the Mississippi River drainage mostly migrate westward and southward through Mexico to Central and South America; birds from the area east of central Alabama migrate mostly through Florida to Trinidad and South America. A banded bird nested near its hatching place in its second year of life.--Courtesy/ Paul A. Stewart.

Feindt, Paul, and Franz-Jürgen Kollibay. DER TEREKWASSERLÄUFER (TRINGA TEREK) IN SÜD-NIEDERSACHSEN. [THE TEREK SANDPIPER (TRINGA TEREK) [= XENUS CINEREA?] IN SOUTHERN LOWER SAXONY.] Ornithol. Mitteil. 19(8): 161-168, 4 figs. Aug. 1967. WR 128: 54
[Wallmodenweg 7, Hildesheim, Germany.] The establishment, habitat, field identification and characteristics, behavior, voice, and trapping of the Terek sandpiper.

Feldmann, Reiner. STARKER LIMIKOLENZUG AN EINEM WESTFÄLISCHEN RASTPLATZ IM HERBST 1965. [HEAVY SHOREBIRD MIGRATION TO A WESTPHALIAN RESTING-PLACE DURING FALL, 1965.] Ornithol. Mitteil. 18(1): 13-18, 4 figs. Jan. 1966. In German. WR 128: 54
[Friedhofstrasse 22, Büsperde i. W., Germany.]

Forsythe, Dennis M. EGG TEETH AND HATCHING METHODS OF THE LONG-BILLED CURLEW. Wilson Bull. 79(3): 340-341. Sept. 1967. WR 128: 54
[Utah State Univ., Logan.] Egg teeth were present on both the upper and lower mandibles of some long-billed curlews (Numenius americanus). In the hatching process, young birds made a circular enlargement of the pip hole to about 1.5 cm in diameter; then the shell of the large end of the egg was split into three triangular pieces enabling the young to escape from the shell.--Courtesy/ Paul A. Stewart.

Frohling, Robert C. BONAPARTE'S GULL FEEDING ON WALNUT MEAT. Wilson Bull. 79(3): 341. Sept. 1967. WR 128: 54
[Howell, Mich.] Walnut meats were found in the crop and gizzard of a Bonaparte's gull (Larus philadelphia).--Courtesy/ Paul A. Stewart.

Goethe, F. KUSTERNSEESCHWALBE (STERNA PARADISAEA) 29 JAHRE ALT. [STERNA PARADISAEA, 29 YEARS OLD.] Vogelwarte 23(4): 313. 1966. [From Biol. Abstr. 48(13), 1967. In German.] WR 128: 54

Grant, P. J., and R. E. Scott. IDENTIFICATION OF IMMATURE MEDITERRANEAN GULLS. British Birds 60(9): 365-368, 1 pl. Sept. 1967. WR 128: 54
"Larus melanocephalus."

Green, Janet C. THE ICELAND GULL IN MINNESOTA / ITS STATUS AND IDENTIFICATION. Loon 39(2): 44-48. June 1967. WR 128: 54
[9773 North Shore Drive, Duluth, Minn.] "Larus glauceides."

Hammerschmidt, Rolf. KLEINRALLE (PORZANA PARVA) UND ZWERGRALLE (PORZANA PUSILLA) IM BEZIRK OSNABRÜCK. [THE LITTLE CRAKE (PORZANA PARVA) AND BAILLON'S CRAKE (PORZANA PUSILLA) IN THE OSNABRÜCK DISTRICT.] Ornithol. Mitteil. 17 (9): 185-186, illus. Sept. 1965. In German. WR 128: 54
[Hemkerstrasse 33, Bramsche, Germany.]

Hildén, Olavi. ÜBER DIE BRUTBETEILIGUNG DER GESCHLECHTER BEIM MORNELL-REGENPFEIFER, CHARADRIUS MORINELLUS L. [ON INCUBATION BY THE SEXES IN THE DOTTEREL CHARADRIUS MORINELLUS.] Ornis Fennica 43(1): 16-19. 1966. In German with Finnish summ. WR 128: 55

Höhn, E. Otto. OBSERVATIONS ON THE BREEDING BIOLOGY OF WILSON'S PHALAROPE (STEGANOPUS TRICOLOR) IN CENTRAL ALBERTA. Auk 84(2): 220-244, 4 figs. Apr. 1967. WR 128: 55
[Univ. Alberta, Edmonton.] The following are discussed: breeding range, habitat, arrival in spring, testicular cycle, ovarian cycle, pair formation, pursuit flights, precopulatory behavior, copulation, aggressive behavior of males, nest building, egg laying, incubation, hatching, downy young, vocalizations, departure of females, maintenance behavior, polyandry, territory, and endocrine basis of breeding plumage and sexual behavior.--Courtesy/ Paul A. Stewart.

Houston, C. Stuart. RECOVERIES OF BLACK-CROWNED NIGHT HERONS BANDED IN SASKATCHEWAN. Blue Jay 25(3): 112-113, 1 fig. Sept. 1967. WR 128: 55
[863 University Drive, Saskatoon, Saskatchewan, Canada.]

Kobus, Dieter. BEGEGNUNG MIT DEN LETZTEN DEUTSCHEN GOLDREGENPFEIFERN (PLUVIALIS APRICARIUS). [ENCOUNTER WITH THE LAST GERMAN EURASIAN GOLDEN PLOVER (PLUVIALIS APRICARIUS).] Ornithol. Mitteil. 19(1): 10-13, illus. Jan. 1967. In German. WR 128: 55
[Burgweg 3, Oberbiel, Germany.]

Martini, Erlend. OTOLITHEN IN GEWÖLLEN DER RAUBSEESCHWALBE (HYDROPROGNE CASPIA). [OTOLITHS IN PELLETS OF THE CASPIAN TERN (HYDROPROGNE CASPIA).] Bonner Zool. Beiträge 15(1/2): 59-71, 22 figs on 2 pls. 1964. In German with English summ. WR 128: 55
Otoliths of 14 species of fishes have been identified from pellets of the Caspian tern (Hydroprogne caspia), collected at breeding colonies in the southern part of San Diego Bay, California.--From summ.

Martini, Erlend. OTOLITHEN IN GEWÖLLEN DER WESTMÖWE (LARUS OCCIDENTALIS). [OTOLITHS FROM PELLETS OF THE WESTERN GULL (LARUS OCCIDENTALIS).] Bonner Zool. Beiträge 17(3/4): 202-227, 3 figs., 2 pls. 1966. In German with English summ. WR 128: 55
Otoliths of 25 species of fishes have been identified from pellets of the western gull (Larus occidentalis), collected near Cormorant Colony at La Jolla, California.--From summ.

Nester, Horst. ZUGGEWOHNHEITEN SOWIE GRÖSSEN- UND GEWICHTS-VARIATIONEN DES FLUSSUFERLÄUFERS (TRINGA HYPOLEUCOS). [MIGRATION HABITS AND VARIATIONS IN SIZE AND WEIGHT IN TRINGA HYPOLEUCOS.] Vogelwarte 23(4): 291-300, illus. 1966. [From Biol. Abstr. 48(13), 1967. In German.] WR 128: 55

Meyerriecks, Andrew J., and David W. Nellis. EGRETS SERVING AS "BEATERS" FOR BELTED KINGFISHERS. Wilson Bull. 79(2): 236-237. June 1967. WR 128: 55
[Univ. South Fla., Tampa.] Belted kingfishers (Megaceryle alcyon) followed and dived into the water near common egrets (Casmerodius albus) and snowy egret (Egretta thula).--Courtesy/ Paul A. Stewart.

Mukhamadiev, S. A. [HELMINTH FAUNA OF THE CRIMEAN HERRING GULL.] Izvest. Akad. Nauk Tadzh. SSR Otdel. Biol. Nauk. p. 119-121. 1966. [From Biol. Abstr. 48(15), 1967. In Russian.] WR 128: 55
[Acad. Sci. Tadzh. SSR, Dushanbe, USSR.]

Müller, Harro-Herbert. LIMIKOLEN-SOMMERBEOBACHTUNGEN AUF SARDINIEN. [SUMMER OBSERVATIONS OF SHOREBIRDS IN SARDINIA.] Ornithol. Mitteil. 18(7): 134-136. July 1966. In German. WR 128: 55
[Hilgenstockstrasse 12, Dortmund-Hörde, Germany.]

Niethammer, Jochen. DER ZUG VON KRANICHEN (GRUIDAE) BEI KABUL, AFGHANISTAN. [THE MIGRATION OF GRUIDAE NEAR KABUL, AFGHANISTAN.] Vogelwarte 23(4): 308-309. 1966. [From Biol. Abstr. 48(13), 1967. In German.] WR 128: 56

Omel'ko, M. A. [THE VARIEGATED SNIPE ROSTRATULA BENGHOLENSIS L. IN PRIMORJE.] Zap. Primorskogo Fil. Geogr. Obshch. SSSR 1(24): 67-78. 1965. [From Biol. Abstr. 48(13), 1967, from Referat. Zhur., Biol., 1966, no. 11285. Transl. of Russian abstr.] WR 128: 56

Peakall, David B. RECENT CHANGES IN THE STATUS OF THE GREAT BLACK-BACKED GULL. Kingbird 17(2): 69-73, 1 fig. May 1967. WR 128: 56
[Upstate Med. Center, 766 Irving Ave., Syracuse, N.Y.] Summary: The great black-backed gull has increased greatly upstate as a winter visitor in the last 2-3 decades. While there are no breeding records for the state away from the coast this should be watched for, especially on the islands of the Hudson and Niagara Rivers where summering is regular. On Long Island the rapid increase of the breeding population may well start to affect the numbers of other species of colonial seabirds.

Proctor, Vernon W., Charles R. Malone, and Victor L. DeVlaming. DISPERSAL OF AQUATIC ORGANISMS: VIABILITY OF DISSEMINULES RECOVERED FROM THE INTESTINAL TRACT OF CAPTIVE KILLDEER. Ecology 48(4): 672-676. Summer 1967. WR 128: 56
[Texas Technol. Coll., Lubbock.] Some disseminules remained viable 12-24 hours in the digestive tracts of killdeer (Charadrius vociferus). Eggs of Artemia salina and oospores of Chara zeylanica remained viable for the longest periods.--Courtesy/ Paul A. Stewart.

Stiefel, Arnd. GEMEINSAMES ÜBERNACHTEN VON ZWERGSEESCHWALBEN (STERNA ALBIFRONS). [COMMUNAL NIGHT-TIME ROOSTS OF THE LITTLE TERN (STERNA ALBIFRONS).] Ornithol. Mitteil. 18(2): 31-32. Feb. 1966. In German. WR 128: 56

Temme, Manfred. "BEGEGNUNGSZEREMONIEN" BEI UNAUSGEFÄRBTEN MANTELMÖWEN (LARUS MARINUS L.). ["MEETING CEREMONIES" OF JUVENILE GREAT BLACK-BACKED GULLS (LARUS MARINUS L.).] Ornithol. Mitteil. 19(8): 154-160, 8 figs. Aug. 1967. In German with English summ. WR 128: 56
[Nordseebad, Norderney, Germany.]

Thiede, Walther. DIE VERBREITUNG DES ROTSCHENKELS, TRINGA TOTANUS (L.). 17. ZUG UND WINTERQUARTIERE IN EINIGEN LÄNDERN WESTASIENS. [THE DISTRIBUTION OF TRINGA TOTANUS (L.). 17. MIGRATION AND WINTER QUARTERS IN SOME COUNTRIES OF WEST ASIA.] Zool. Anz. 117(2): 165-173. 1966. [From Biol. Abstr. 48(13), 1967. In German.] WR 128: 56
[Lessingstrasse 30, Hamburg, Germany.]

Thiede, Walther. DIE VERBREITUNG DES ROTSCHENKELS, TRINGA TOTANUS (L.). 18. ZUG UND ÜBERWINTERUNG IM KONTINENTALEN SÜDASIEN. [THE DISTRIBUTION OF TRINGA TOTANUS (L.). 18. MIGRATION AND OVERWINTERING IN CONTINENTAL SOUTH ASIA.] Zool. Anz. 177(2): 173-182. 1966. [From Biol. Abstr. 48(13), 1967.] WR 128: 56
[Lessingstrasse 30, Hamburg, Germany.]

Thimm, Eberhard. BEOBACHTUNGEN AM NEST DES BRACHVOGELS (NUMENIUS ARQUATA). [OBSERVATIONS OF THE NEST OF THE CURLEW (NUMENIUS ARQUATA).] Ornithol. Mitteil. 19(1): 2-6, 7 figs. Jan. 1967. In German. WR 128: 56
[Waldsiendlung, Konstanz, Germany.]

Vermeer, Kees. FOREIGN EGGS IN NEST OF CALIFORNIA GULLS. Wilson Bull. 79 (3): 341. Sept. 1967. WR 128: 56
[10177 - 104 St., Edmonton, Alberta, Canada.] Eggs of several species of birds were found in nests of California gulls (Larus californicus). The eggs had presumably been swallowed entire by the gulls and later regurgitated to be broken and eaten. Instead of being eaten the foreign eggs rolled into the nests and were incubated by the gulls.--Courtesy/ Paul A. Stewart.

Völker, Otto. SELTENE LIMICOLEN IM GEBIET DER NÖRDLICHEN OBERRHEINEBENE. [RARE SHOREBIRDS IN THE NORTHERN UPPER RHINE DISTRICT.] Ornithol. Mitteil. 17(6): 120-121. June 1965. In German. WR 128: 57
[Ludwigstrasse 23, Giessen, Germany.]

Von Westernhagen, Wolfgang. DÜNNSCHNABELMÖWEN (LARUS GENEI) IN SÜDWEST-EUROPA. [SLENDER-BILLED GULL (LARUS GENEI) IN SOUTHWEST EUROPE.] Ornithol. Mitteil. 18(11): 217-220, illus. Nov. 1966. In German. WR 128: 57
[Langebrückstrasse 1, Preetz, Germany.]

HAWKS & OWLS

Bijleveld, M. F. I. J. OM HET BEHOUD VAN DE HAVIK. [ON THE PROTECTION OF THE GOSHAWK ACCIPITER GENTILIS.] De Levende Nat. 69: 73-79, 4 figs. 1966. In Dutch with English summ. WR 128: 57
The number of breeding pairs of goshawks in the Netherlands decreased from 80 in 1959/60 to 20 in 1963. In 1963 the Netherlands imported 40 goshawks from Germany. In 1964 nesting by 22 pairs yielded 32 young. In 1965 only 18 pairs nested resulting in 20 young.--From summ.

Bruns, Herbert. WINTERLICHE ANSAMMLUNGEN VON WALDOHREULEN IN DEN STÄDTEN. [WINTER AGGREGATIONS OF LONG-EARED OWL IN CITIES.] Ornithol. Mitteil. 17(1): 6-9, 1 fig. Jan. 1965. In German. WR 128: 57
[Postfach 169, Wiesbaden, Germany.] During the severe winter of 1962-63 gatherings of Asio otus were reported from more than thirty cities. Sixty birds were reported from one city.

Bussjaeger, Louis J., Charles C. Carpenter, Harold L. Cleveland, and Dale L. Marcellini. TURKEY VULTURE MIGRATION IN VERACRUZ, MÉXICO. Condor 69(4): 425-426. July-Aug. 1967. WR 128: 57
[Univ. Okla., Norman.] Several thousand turkey vultures (Cathartes aura) were observed drifting northward over the coastal lowlands.--Courtesy/ Paul A. Stewart.

Curry-Lindahl, Kai. BIRDS OF PREY AND THEIR ENVIRONMENT. Rept. ICBP Working Conf. on Birds of Prey and Owls. p. 11-24. 1964. WR 128: 57
[Nordiska Museet & Skansen, Stockholm, Sweden.]

Demandt, Carl. ÜBER DIE SIEDLUNGSDICHTE UND SIEDLUNGSWEISE EINIGER GREIFVÖGEL IN NORDHESSEN. [ON COLONY DENSITY AND STRUCTURE OF SOME BIRDS OF PREY IN NORTH HESSE.] Ornithol. Mitteil. 19(2): 35-36. Feb. 1967. In German. WR 128: 57
[Rehwiesenweg 7, Niedenstein, Germany.]

Demandt, Carl. FRAGEBOGEN ÜBER GREIFVÖGEL -- EINE KRITISCHE BETRACHTUNG. [THE PROBLEM OF BIRDS OF PREY -- A CRITICAL CONSIDERATION.] Ornithol. Mitteil. 19(5): 95-96. May 1967. In German. WR 128: 57

Demandt, C. DER WANDERFALKE (FALCO PEREGRINUS) ALS BRUTVOGEL WESTFALENS. [THE PEREGRINE (FALCO PEREGRINUS) AS A BREEDING BIRD OF WESTPHALIA.] Ornithol. Mitteil. 17(6): 125-126. June 1965. In German. WR 128: 57

Fitzgerald, B. M. PREY OF A FAMILY OF NEW ZEALAND FALCONS. Notornis 12(3): 181-184, 1 fig. Sept. 1965. WR 128: 57
"Falco novaeseelandiae."

Freemyer, H. R. NESTING RED-TAILED HAWKS IN LYON COUNTY, KANSAS. Kans. Ornithol. Soc. Bull. 17: 15-16. 1966. [From Auk 84(2), 1967.] WR 128: 57
Notes on placement, structure, and success of 22 nests.

Grempe, Günther. BEITRÄGE ZUR ERNÄHRUNGSBIOLOGIE DES SPERLINGKAUZES (GLAUCIDIUM PASSERINUM) IM ÖSTLICHEN EUROPA. [CONTRIBUTIONS ON THE BIOLOGY OF FEEDING IN THE PYGMY OWL (GLAUCIDIUM PASSERINUM) IN EASTERN EUROPE.] Ornithol. Mitteil. 17(10): 197-199. Oct. 1965. In German. WR 128: 58
[Kopernikusstrasse 35, Rostock, Germany.]

Güttinger, Hansruedi. ZUR WINTERSTERBLICHKEIT SCHWEIZERISCHER SCHLEIEREULEN, TYTO ALBA, MIT BESONDERER BERÜCKSICHTIGUNG DES WINTERS 1962/63. [ON WINTER MORTALITY OF SWISS BARN OWLS TYTO ALBA WITH PARTICULAR CONSIDERATION OF THE WINTER OF 1962/63.] Ornithol. Beobachter 62(1): 14-23, 1 fig. 1965. In German. WR 128: 58

Heitkamp, Ulrich. ZUR ERNÄHRUNGSÖKOLOGIE DER WALDOHREULE (ASIO OTUS). [ON THE ECOLOGY OF FEEDING OF THE LONG-EARED OWL (ASIO OTUS).] Ornithol. Mitteil. 19(7): 139-143. July 1967. In German. WR 128: 58
[Asternweg 17, Göttingen, Germany.]

Houston, C. Stuart. RECOVERIES OF RED-TAILED HAWKS BANDED IN SASKATCHEWAN. Blue Jay 25(3): 109-111, 1 fig. Sept. 1967. WR 128: 58
[863 University Drive, Saskatoon, Saskatchewan, Canada.] Based on records collected during 1923-1965.

Kumerloeve, H. ZU VIELE GREIFVÖGEL IN DER TÜRKEI? ABSCHUSS ZUGUNSTEN DER NIEDERJAGD? [TOO MANY BIRDS OF PREY IN TURKEY? SHOOTING RATHER THAN UNDERHUNTING?] Ornithol. Mitteil. 19(3): 59-60. Mar. 1967. In German. WR 128: 58
[Hubert-Reisner-Strasse 7, München-Gräfelfing, Germany.]

Lenz, Michael. DER DURCHZUG DES MERLINS (FALCO COLUMBARIUS) IN GROSS-BERLIN VON 1955-1964. [THE MIGRATION OF THE MERLINS (FALCO COLUMBARIUS) IN GREATER-BERLIN DURING 1955-1964.] Ornithol. Mitteil. 17(11): 229-231, 2 figs. Nov. 1965. In German. WR 128: 58
[Ottokarstrasse 16, Berlin, Germany.]

Marshall, Joe T., Jr. PARALLEL VARIATION IN NORTH AND MIDDLE AMERICAN SCREECH-OWLS. Western Foundation Vertebrate Zool., Monograph no. 1. 72 p., 31 figs. + frontispiece. 10 Aug. 1967. Available from Western Foundation of Vertebrate Zoology, 1100 Glendon Ave., Los Angeles, Calif., at $3.50. WR 128: 58

Seven species of Otus occupy North and Middle America, where they overlap without interbreeding, in such combinations as their distributions and habitats permit. Five are endemic to this continent. Otus guatemalae and Otus choliba continue across the isthmus of Panamá to range over much of South America. One pair of similar species is peculiar, with restricted distribution in mountain forests of Middle America, and colored in spots and bars. They are Otus barbarus and Otus clarkii, widely separated geographically and differing greatly in size. The others are of normal Otus coloration, patterned with black shaft streaks and crossbars. Otus flammeolus, of pine forests, occurs higher in the mountains than the others. It is related to the Otus scops group of the Old World, but differs so much from O. scops in voice as to be unhesitatingly placed in a separate species. Otus trichopsis and O. asio constitute a pair unique in feathered toes, more alike than any other two among the seven species. Neither is closely related to Otus bakkamoena of Asia. They overlap geographically, occur together in the same habitat frequently, and do not interbreed. Reproductive isolation is through recognition of the different timing of notes in the songs; one species never responds to the songs of the other even though the notes are of similar quality and pitch.--From concl.

Neyburg, Bernd-Ulrich. BEOBACHTUNGEN ÜBER DAS VERHALTEN DES SCHWARZMILANS (MILVUS MIGRANS). [OBSERVATIONS ON THE BEHAVIOR OF THE KITE (MILVUS MIGRANS).] Ornithol. Mitteil. 18(12): 239-245, illus. Dec. 1966. In German. WR 128: 59
[Herbertstrasse 14, Berlin, Germany.]

Miller, Alden H., Ian I. McMillan, and Eben McMillan. THE CURRENT STATUS AND WELFARE OF THE CALIFORNIA CONDOR. Natl. Audubon Soc. Res. Rept. no. 6. ii + 61 p., 4 figs. + 4 pls. 1965. WR 128: 59
[Museum Vert. Zool., Berkeley, Calif.] Contents: Numbers, reproduction and survival, food and foraging, water, causes of mortality, conservation, and appendix (records of occurrence).

Mueller, Helmut C., and Daniel D. Berger. SOME OBSERVATIONS AND COMMENTS ON THE PERIODIC INVASIONS OF GOSHAWKS. Auk 84(2): 183-191, 2 figs. Apr. 1967. WR 128: 59
[Univ. N.C., Chapel Hill.] There were invasions of goshawks (Accipiter gentilis) in Wis. in the years 1961-63, consisting mostly of birds hatched in 1961. The invasions were preceded by decreases in populations of snowshoe hare (Lepus americanus) and ruffed grouse (Bonasa umbellus).--Courtesy/ Paul A. Stewart.

Mueller, Helmut C., and Daniel D. Berger. TURKEY VULTURES ATTACK LIVING PREY. Auk 84(3): 430-431. July 1967. WR 128: 59
[Univ. N.C., Chapel Hill.] A turkey vulture (Cathartes aura) killed and ate a house sparrow (Passer domesticus) tethered near a mist net.--Courtesy/ Paul A. Stewart.

Niederwolfsgruber, F. VOM STEINADLER (AQUILA CHRYSAËTOS) IN TIROL. [ON THE GOLDEN EAGLE (AQUILA CHRYSAËTOS) IN TYROL.] Z. Jagdwissenschaft 10(2): 54-61, 3 figs. June 1964. In German with French and English summ. WR 128: 59
Summary: After the population of golden eagles in Tyrol had been much reduced by shooting at least 20 head in the years 1958/59, it was demanded that further shooting must be subject to exact scientific investigation concerning density of population etc. During the following years 13 eyries were controlled and the young eagles were ringed. Offhand tests in the course of these investigations informed us also of the young eagles' diet. Finally the act of putting the rings on is described and the first results of distant findings (South of France) are treated. The possibilities of shooting golden eagle are considered and it is recommended to prefer the clearing of eyries in certain cases.

Oblinger, Hermann, and Johann Konrad. STEINADLER AUF GEMSENJAGD. [CHAMOIS-HUNTING OF THE GOLDEN-EAGLE.] Ornithol. Mitteil. 18(3): 46-48, illus. Mar. 1966. In German. WR 128: 59

Schnell, Gary D. ENVIRONMENTAL INFLUENCE ON THE INCIDENCE OF FLIGHT IN THE ROUGH-LEGGED HAWK. Auk 84(2): 173-182, 6 figs. Apr. 1967. WR 128: 59
[Univ. Kans., Lawrence.] Summary: Changes in the relative numbers of wintering rough-legged hawks flying and standing were analyzed in relation to several environmental variables. One-third of all the birds recorded (178 of 534) were flying when first seen. The data indicate that local weather conditions are important in determining rough-legged hawk activity in winter. Optimum conditions for flight occurred with high wind velocity, clear skies, rising air pressure, low relative humidity, and high temperature. There was no statistically significant difference in hawk activity at different times of day. The fact that activity was correlated with several variables indicates that the rough-legs react to the end product of numerous interrelated and interacting variables, including those tested.--Courtesy/ Paul A. Stewart.

Sulkava, Seppo. ZUR NAHRUNG DES STEINADLERS, AQUILA CHRYSAETOS (L.), IN FINNLAND SÜDLICH VOM RENTIERZUCHTGEBIET. [ON THE FEEDING HABITS OF THE GOLDEN EAGLE AQUILA CHRYSAETOS (L.) IN FINLAND SOUTH OF THE REINDEER BREEDING RANGE.] Aquila Ser. Zool. 5: 1-13, 5 figs. 1967. In German. WR 128: 60
[Univ. Oulu, Oulu, Finland.]

Thiollay, J. M. ESSAI SUR LES RAPACES DU MIDI DE LA FRANCE. DISTRIBUTION. ECOLOGIE. TENTATIVE DE DÉNOMBREMENT. [ESSAY ON THE BIRDS OF PREY OF THE SOUTH OF FRANCE. DISTRIBUTION. ECOLOGY. ATTEMPT AT DETERMINING THE NUMBER.] Alauda Rev. Int. Ornithol. 34(3): 210-227. 1966. [From Biol. Abstr. 48(15), 1967. In French.] WR 128: 60

Thiollay, Jean-Marc. ECOLOGIE D'UNE POPULATION DE RAPACES DIURNES EN LORRAINE. [ECOLOGY OF A POPULATION OF DIURNAL BIRDS OF PREY IN LORRAINE.] Terre & Vie 1967(2): 116-183. 1967. In French with English summ. WR 128: 60
Eight dominant species are recognized. Data on population density at various times of the year, on fecundity, nesting success, and food habits are summarized. Habitat preferences, hunting methods, and size of home range are discussed. A tentative estimation of the metabolic impact of bird and mammal predators upon the vertebrate community was made. Diurnal birds of prey exert a "predation pressure" which is 10 to 20 times smaller than that of owls and mammalian carnivores taken together.--From summ.

Weigand, John P. FERRUGINOUS HAWK ATTACKS GREAT HORNED OWL. Auk 84(3): 433. July 1967. WR 128: 60
[Mont. Fish & Game Dept., Great Falls.] "With legs and feet outstretched and tail fanned", a ferruginous hawk (Buteo regalis) attacked a flying great horned owl (Bubo virginianus).--Courtesy/ Paul A. Stewart.

BLACKBIRDS, STARLINGS, CROWS

Berthold, P. ZUM VERHALTEN NICHTBRÜTENDER EINJÄHRIGER STARE (STURNUS VULGARIS). [ON THE BEHAVIOR OF NON-BREEDING YEARLING STARLINGS (STURNUS VULGARIS).] Vogelwarte 23: 231-232. 1966. [From Auk 84(2), 1967. In German.] WR 128: 60

Burtt, Harold E., and Maurice L. Giltz. POPULATION TRENDS FOR "BLACKBIRDS". Redstart 34(3): 86-90, 4 figs. July 1967. WR 128: 60
[Ohio State Univ., Columbus.] Analysis of results of continuous decoy trapping of grackle, cowbird, redwing and starling during 1964-1966.

Clark, George A. INDIVIDUAL VARIATION IN NATAL PTERYLOSIS OF RED-WINGED BLACKBIRDS. Condor 69(4): 423-424. July-Aug. 1967. WR 128: 60
[Univ. Conn., Storrs.] Wide variation was observed in the amounts or existence of natal down on the interscapular region.--Courtesy/ Paul A. Stewart.

Darst, Philip H., and Dale Hein. PHOTOPERIOD AND SIZE OF TESTES OF EASTERN MEADOWLARKS. Auk 84(2): 265, 1 fig. Apr. 1967. WR 128: 60
[Clemson Univ., Clemson, S.C.] There was a linear increase in the size of the testes with increased photoperiod.--Courtesy/ Paul A. Stewart.

Diesch, S. L., and Keith R. Long. STARLINGS AND HEALTH. Iowa Bird Life 37 (2): 45-48, 1 fig. June 1967. WR 128: 60
Summary: Starlings have created health problems in many Iowa communities, as well as elsewhere in the United States, and they may continue to do so. Histoplasmosis is associated with repeated annual roostings of birds. Moving the birds from one location to another is not a final answer to the problem, but repelling starlings from concentrated population centers is necessary. An amplified recorded "distress call" has been used successfully as a repellent on two occasions in Iowa.

Goddard, Stephen V., and Veryl V. Board. REPRODUCTIVE SUCCESS OF RED-WINGED BLACKBIRDS IN NORTH CENTRAL OKLAHOMA. Wilson Bull. 79(3): 283-289. Sept. 1967. WR 128: 61

[Wis. State Univ., River Falls.] Some birds were paired by 17 April, but the peak of nesting activity was during the third week of May. Average clutch size was 3.4 eggs, hatching success was 38.9%; nesting success was 26.7%. Egg and nestling predation and tipping of nests were the chief causes of nest failure. Nesting success was higher before than after 1 June, and early clutches were larger than late ones. Nesting success decreased with increasing height of the nests from the ground. A new nest was usually, but not always, constructed following unsuccessful nesting attempts.--Courtesy/ Paul A. Stewart.

Grant, C. Val. BREEDING BEHAVIOR OF AN UNIQUELY MARKED STARLING. Wilson Bull. 79(2): 243-244, 1 fig. June 1967. WR 128: 61

[U.S. Bur. Sport Fisheries & Wildl., Denver, Colo.] A male starling (Sturnus vulgaris) successfully nested after surgery for implanting telemetering instruments and when carrying masking tape markers.--Courtesy/ Paul A. Stewart.

Horn, Henry Stainken. COLONIAL NESTING IN THE BREWER'S BLACKBIRD (EUPHAGUS CYANOCEPHALUS) AND ITS ADAPTIVE SIGNIFICANCE. Ph.D. thesis, Univ. Wash. 96 p. 1966. [From Dissertation Abstr. 27(12B), 1967.] WR 128: 61

It is concluded that colonial nesting in the Brewer's blackbird is primarily adaptive to the variable nature of the food supply.

Oelke, Hans. SIEDLUNGSDICHTE UND BRUTPLATZWAHL DES STARES (STURNUS VULGARIS) IN DER NORDDEUTSCHEN KULTURLANDSCHAFT. [COLONY DENSITY AND BREEDING SITE SELECTION OF THE STARLING IN NORTH-GERMAN CULTIVATED LAND.] Ornithol. Mitteil. 19(2): 31-34. Feb. 1967. In German with English summ. WR 128: 61

[Duke Univ., Durham, N.C.] Breeding site selection for Sturnus vulgaris was as follows: 87%--urban and rural areas, 12.4%--forests and woods, and 0.6%--pond-edges, pasture, meadow and field land.

Payne, Robert B. GONADAL RESPONSES OF BROWN-HEADED COWBIRDS TO LONG DAYLENGTH. Condor 69(3): 289-297, 1 fig. May-June 1967. WR 128: 61

[Univ. Calif., Berkeley.] Male and female brown-headed cowbirds (Molothrus ater obscurus) exposed to 17 hours of light per day during winter developed enlarged testes and ovarian follicles, respectively. Female cowbirds in captivity did not develop mature ovaries. Both sexes were unresponsive to long daylengths in summer at the time of natural regression of gonads.--From summ. Courtesy/ Paul A. Stewart.

Tate, James, Jr. COWBIRD REMOVES WARBLER NESTLING FROM NEST. Auk 84(3): 422. July 1967. WR 128: 61

[Univ. Nebr., Lincoln.] A cowbird (Molothrus ater) carried a nestling black-throated green warbler (Dendroica virens) away from the nest and dropped it to the ground.--Courtesy/ Paul A. Stewart.

OTHER BIRDS

Adamyan, M. S. [THE ECOLOGY OF THE EASTERN WOODCHAT SHRIKE IN THE ARMENIAN SSR.] Zool. Sb. Akad. Nauk Arm. SSR 13: 83-104. 1964. [From Biol. Abstr. 48 (15), 1967, from Referat. Zhur., Biol., 1965, no. 5I187. Transl. of Russian abstr.] WR 128: 61

Alleijn, F., S. Braaksma, J. D. G. Peereboom Voller, and J. A. A. van Schendel. DE BIJENETER (MEROPS APIASTER) IN NEDERLAND EN IN EUROPA. [THE BEE-EATER (AVES: MEROPIDAE) IN HOLLAND AND IN EUROPE.] De Levende Nat. 69: 97-106, 1 fig. 1966. In Dutch. WR 128: 61

Anderson, Daniel W., and James C. Bartonek. ADDITIONAL OBSERVATIONS ON THE STATUS OF NORTH AMERICAN WHITE PELICANS. Condor 69(3): 311-313, 1 fig. May-June 1967. WR 128: 62

[Univ. Wis., Madison.] Reports on status of breeding colonies of white pelicans (Pelecanus erythrorhynchos) during 1963-65 in localities of Manitoba, Saskatchewan, and North Dakota.--Courtesy/ Paul A. Stewart.

Andrle, Robert F. NOTES ON THE BLACK CHACHALACA (PENELOPINA NIGRA). Auk 84(2): 169-172, 1 fig., 1 pl. Apr. 1967. WR 128: 62

[Buffalo Museum Sci., Buffalo, N.Y.] Abundance, range, voice, and plumage description.--Courtesy/ Paul A. Stewart.

Balfour, E., A. Anderson, and G. M. Dunnet. ORKNEY CORMORANTS--THEIR BREEDING DISTRIBUTION AND DISPERSAL. Scottish Birds 4(7): 481-493, 4 figs. Autumn 1967. WR 128: 62

Data on the past status of the cormorant in Orkney are scanty, but about 600 pairs now breed at two main and five smaller colonies, mostly on very small islands. Counts and details of changes are given, and notes on nesting and the breeding season. Part of a colony tends to shift to nearby ground each year.--From summ.

Bock, A., H. Mester, and W. Prünte. SEGGENROHRSÄNGER (ACROCEPHALUS PALUDICOLA) IN WESTFALEN. [THE AQUATIC WARBLER (ACROCEPHALUS PALUDICOLA) IN WESTPHALIA.] Ornithol. Mitteil. 17(7): 138-139. July 1965. In German. WR 128: 62

[Hassleistrasse 46, Fröndenberg/Ruhr, Germany.]

Curry-Lindahl, Kai. MOLT, BODY WEIGHTS, GONADAL DEVELOPMENT, AND MIGRATION IN MOTACILLA FLAVA. Proc. 13th Internatl. Ornithol. Congress. p. 960-973, 1 fig. 1963. WR 128: 62

[Nordiska Museet & Skansen, Stockholm, Sweden.]

Dick, James A., and James D. Rising. A COMPARISON OF FOODS EATEN BY EASTERN KINGBIRDS AND WESTERN KINGBIRDS IN KANSAS. Kans. Ornithol. Soc. Bull. 16(4): 23-24. 17 Dec. 1965. WR 128: 62

[Univ. Kans., Lawrence.]

Downes, M. C. PRESERVING THE PLAINS TURKEY. Victoria Fisheries & Wildl. Dept.--Wildl. Circ. no. 20. 4 p., illus. 1967. WR 128: 62

Reprint from the "Bird Lover" 20, May 1967, on the restocking effort of the Australian bustard (Ardeotis australis) in Victoria.

Kobus, Dieter. DAS VERHALTEN DES KAMPFLÄUFERWEIBCHEN (PHILOMACHUS PUGNAX) WÄHREND DER BRUTZEIT. [THE BREEDING BEHAVIOR OF THE RUFF (PHILOMACHUS PUGNAX).] Ornithol. Mitteil. 19(6): 112-114, 2 figs. June 1967. In German. WR 128: 62

Löschau, Martin. DER WASSERPIEPER (ANTHUS SPINOLETTA) EIN HÄUFIGER GAST IN BERLINER RAUM. [THE WATER PIPIT (ANTHUS SPINOLETTA)--A FREQUENT VISITOR TO THE BERLIN AREA.] Ornithol. Mitteil. 18(11): 230-232. Nov. 1966. In German. WR 128: 62

[Tauroggener Strasse 37, Berlin, Germany.] Records for 1959-1966.

Matthes, Willi. ZUR VERBREITUNG UND BIOLOGIE DES SCHWARZSTIRNWÜRGERS (LANIUS MINOR) IN RHEINHESSEN. [ON THE DISTRIBUTION AND BIOLOGY OF THE LESSER GREY SHRIKE (LANIUS MINOR) IN RHEINHESSEN PROVINCE.] Ornithol. Mitteil. 17(5): 91-98, illus. May 1965. In German. WR 128: 62

Miles, Merriam L. AN ADDITION TO THE AVIFAUNA OF THE UNITED STATES: MYIARCHUS STOLIDUS SAGRAE. Auk 84(2): 279. Apr. 1967. WR 128: 63
[Sutton Place, Orrville, Ala.] A stodid flycatcher, previously known only to occur in the West Indies, was taken in Alabama.--Courtesy/ Paul A. Stewart.

Mougin, Jean-Louis. OBSERVATIONS ECOLOGIQUES A LA COLONIE DE MANCHOTS EMPEREURS DE POINTE GEOLOGIE (TERRE ADELIE) EN 1964. [ECOLOGICAL OBSERVATIONS ON THE COLONY OF EMPEROR PENGUINS MADE AT THE POINTE GEOLOGIE (ADELIE COAST) IN 1964.] Oiseaux Rev. Franc. d'Ornithol. 36(3/4): 167-226, illus. 1966. [From Biol. Abstr. 48(13), 1967. In French with English summ.] WR 128: 63

Mustafaeva, R. G. [AN OUTLINE OF THE ECOLOGY OF THRUSHES IN THE EASTERN TRANSCAUCASUS.] Izv. Akad. Nauk Azerbaidzh. SSR Ser. Biol. Nauk 2: 47-52. 1966. [From Biol. Abstr. 48(16), 1967. In Azerbaidzhani with Russian summ.] WR 128: 63

Patterson, Stephen. A STUDY OF BLUEBIRDS NESTING IN CENTRAL IOWA -- 1965. Iowa Bird Life 37(2): 36-40. June 1967. WR 128: 63
[Iowa State Univ., Ames.] Summary: The data presented indicate that bluebirds are most attracted either to farmed areas or to areas partially farmed but with some pasture or timber rather than to densely timbered areas. Forty-four percent of the boxes placed in intensively farmed areas were occupied, although these nesting attempts were within approximately a quarter of a mile of some timbered area. Forty-six percent of the houses placed in areas where farming was interspersed with timber and pasture were occupied. Compared to the latter two areas, only twenty-nine percent of the houses placed in densely timbered areas were utilized.

Pfeifer, Sebastian. BERGHÄNFLINGE (CARDUELIS FLAVIROSTRIS) IM UNTEREN MAINTAL. [THE TWITE (CARDUELIS FLAVIROSTRIS) IN THE LOWER MAIN REGION.] Ornithol. Mitteil. 18(2): 28-30, illus. Feb. 1966. In German. WR 128: 63
[Steinauerstrasse 33, Frankfurt/Main, Germany.]

Rowan, M. K. A STUDY OF THE COLIES OF SOUTHERN AFRICA. Ostrich 38(2): 63-115, 8 figs. June 1967. WR 128: 63
[Univ. Cape Town, Cape Town, South Africa.] Systematics; distribution and habitats; physical characteristics; perching and locomotion; calls; social behavior and maintenance activities; play; food and feeding patterns; water requirements; parasites and predators; breeding; and molt of Colius striatus, C. colius and C. indicus. [Aves: Coliiformes.]

Siegfried, W. R. GROWTH, PLUMAGE DEVELOPMENT AND MOULT IN THE CROWNED GUINEAFOWL NUMIDA MELEAGRIS CORONATA GURNEY. Cape of Good Hope, Dept. Nat. Conserv. Investigational Rept. no. 8. p. 1-52, 14 figs. 1966. In English with Afrikaans summ. WR 128: 63
Dimensions and weights of birds at different ages are recorded and weight fluctuations are discussed in relation to breeding season. The sequence and timing of plumages and molts in young birds are described with special attention being paid to the remiges and their development. Following the natal plumage, the young guineafowl compared to most other gallinaceous species, assumes an extra plumage--termed the second juvenal plumage--before molting into the first winter plumage. Methods for determining sex and age are noted. The regular series replacement of the primaries may be used to gauge the age of young birds.--From summ.

Skead, C. J. A STUDY OF THE PARADISE FLYCATCHER TER[P]SIPHONE VIRIDIS (MULLER). Ostrich 38(2): 123-132. June 1967. WR 128: 63
[Kaffrarian Museum, King William's Town, South Africa.] Status, plumage features, food, voice, behavior, nesting, eggs, nesting periods and post-nestling period are discussed.

Smith, Susan M. AN ECOLOGICAL STUDY OF WINTER FLOCKS OF BLACK-CAPPED AND CHESTNUT-BACKED CHICKADEES. Wilson Bull. 79(2): 200-207, 2 figs. June 1967. WR 128: 64

[Univ. Wash., Seattle.] In a woods about equally covered with deciduous and coniferous trees, black-capped chickadees (Parus atricapillus) were observed 76% of the time in deciduous trees, and chestnut-backed chickadees (Parus rufescens) were observed 83% of the time in coniferous trees. Black-capped chickadees were found most often less than five feet above the ground; chestnut-backed chickadees were found most often 45-50 feet above the ground.--Courtesy/ Paul A. Stewart.

Verbeek, Nicolaas A. M. BREEDING BIOLOGY AND ECOLOGY OF THE HORNED LARK IN ALPINE TUNDRA. Wilson Bull. 79(2): 208-218, 2 figs. June 1967. WR 128: 64

[Univ. Calif., Berkeley.] Territory, habitat, song, nest, eggs, incubation, nestlings, fledglings, breeding success and post-nesting are discussed.--Courtesy/ Paul A. Stewart.

Weinzierl, Hubert, and Heinrich Hollenbach. UNTERSUCHUNGEN ÜBER ALTERSAUFBAU, SCHWANKUNGEN U. WANDERUNGEN EINER KOHLMEISEN- UND BLAUMEISENPOPULATION DES DONAU-AUWALDES. (4. BERICHT AUS DEM VOGELSCHUTZGEBIET UND LEHRREVIER "BUSCHLETTEN" BEI INGOLSTADT.) [INVESTIGATIONS, AGE COMPOSITION, FLUCTUATION AND MIGRATION OF A GREAT TIT POPULATION AND A BLUE TIT POPULATION OF THE DANUBE-AUWALD. (4. REPORT FROM THE BIRD PROTECTION DEPARTMENT AND THE BUSCHLETTEN INSTITUTE AT INGOLSTADT).] Ornithol. Mitteil. 16(6/7): 131-136, 3 figs. June-July 1964. In German. WR 128: 64

"Parus major and P. caeruleus."

REPTILES & AMPHIBIANS

Alcala, Angel C., and Walter C. Brown. POPULATION ECOLOGY OF THE TROPICAL SCINCOID LIZARD, EMOIA ATROCOSTATA, IN THE PHILIPPINES. Copeia 1967(3): 596-604, 2 figs. 1 Sept. 1967. WR 128: 64

[Silliman Univ., Philippine Islands.]

Alvarado, Ronald H. THE SIGNIFICANCE OF GROUPING ON WATER CONSERVATION IN AMBYSTOMA. Copeia 1967(3): 667-668. 1 Sept. 1967. WR 128: 64

[Oreg. State Univ., Corvallis.]

Bartlett, Peter N., and David M. Gates. THE ENERGY BUDGET OF A LIZARD ON A TREE TRUNK. Ecology 48(2): 315-322, 8 figs. Early Spring 1967. WR 128: 64

[Univ. Calif., Riverside.] Abstract: Lizard and environmental properties which determine the exchange of energy between a lizard and its environment are described and related analytically in the equilibrium state to the lizard temperature. Absorptivities, surface areas, body temperatures, and convection coefficients were determined; metabolic and evaporative energy exchanges estimated for a representative Sceloporus occidentalis. The environmental properties of a particular tree trunk habitat are estimated for a June 21 day and the behavior of S. occidentalis predicted in terms of the positions lizards could assume and maintain their body temperatures within the range characteristic of the population in that habitat. The predictions are compared with field observations.--Courtesy/ Paul A. Stewart.

Batson, Jackie D. SOME COMPARATIVE BEHAVIOR STUDIES ON THREE GENERA OF SALAMANDERS. Trans. Ky. Acad. Sci. 25(3/4): 120-128. 1965. [From Biol. Abstr. 48(12), 1967.] WR 128: 64

[Univ. Ky., Lexington.] Desmognathus f. fuscus and Pseudotriton montanus diastictus were positively photo-tactic and Eurycea b. bislineata was negatively photo-tactic for most of the light-darkness gradients tested. E. bislineata showed the fastest reaction time. All 3 species preferred the moist end of a soil moisture gradient -- 55 to 57.1% as compared to 29.9 to 33.9% moisture. E. bislineata and D. fuscus tended to prefer acid soil while P. diastictus tended to prefer alkaline soil.

Bezy, Robert L. VARIATION, DISTRIBUTION, AND TAXONOMIC STATUS OF THE ARIZONA NIGHT LIZARD (XANTUSIA ARIZONAE). Copeia 1967(3): 653-661, 10 figs. 1 Sept. 1967. WR 128: 65
[Univ. Ariz., Tucson.] Analysis of seven morphological characters in eight granite-dwelling and five yucca-dwelling populations of night lizards from Arizona and California reveals an ecologically-based morphological gradient from a "granitoform" to a "yuccaform" morphotype.--From abstr.

Bogdanov, O. P. [DATA ON THE DISTRIBUTION AND ECOLOGY OF THE REPTILES OF THE MURGAB, BADKHYZ AND KOPET-DAG VALLEYS.] Gerpetologiya. Nauka (Tashkent). p. 23-35. 1965. [From Biol. Abstr. 48(13), 1967, from Referat. Zhur., Biol., 1965, no. 7I254. Transl. of Russian abstr.] WR 128: 65
Information on the range and ecology of 39 species of reptiles is presented. Particular attention is given to the weights of the animals.

Boswall, Jeffery. A DISCOGRAPHY OF PALEARCTIC AMPHIBIAN SOUND RECORDINGS. British J. Herpetol. 3(11): 286-289. 1966. WR 128: 65
[British Broadcasting Corp., Bristol, England.]

Bovbjerg, Richard V., and Ann M. Bovbjerg. SUMMER EMIGRATIONS OF THE FROG RANA PIPIENS IN NORTHWESTERN IOWA. Proc. Iowa Acad. Sci. 71: 511-518, illus. 1965. [From Biol. Abstr. 48(12), 1967.] WR 128: 65
[State Univ. Iowa, Iowa City.]

Brooks, Garnett R., Jr. POPULATION ECOLOGY OF THE GROUND SKINK, LYGOSOMA LATERALE (SAY). Ecol. Monographs 37(2): 71-87, 11 figs. Spring 1967. WR 128: 65
[Coll. William & Mary, Williamsburg, Va.] The following are discussed: home range, territory, dispersion, body growth rate, size and age at sexual maturity, breeding season, sex ratio, reproductive potential, population size, methods of aging, age structure of population, survival, causes of mortality, and activity in relation to temperature, moisture, and time of day.--Courtesy/ Paul A. Stewart.

Busack, Stephen D., and Lawrence D. Busack. NOTES ON THE GROWTH RATE OF MICROSAURA PUMILA PUMILA (LACERTILIA: CHAMAELEONTIDAE). Herpetologica 23(3): 231-232, 1 fig. 20 Sept. 1967. WR 128: 65
[760 Pinnacle Rd., Pittsford, N.Y.]

Bustard, H. Robert. TURTLE BIOLOGY AT HERON ISLAND. Australia Nat. Hist. 15(8): 262-264, illus. 1966. [From Biol. Abstr. 48(13), 1967.] WR 128: 65
[Australian Natl. Univ., Canberra, Australia.]

Campbell, Howard W., and William E. Evans. SOUND PRODUCTION IN TWO SPECIES OF TORTOISES. Herpetologica 23(3): 204-209, 3 figs. 20 Sept. 1967. WR 128: 65
[Univ. Calif., Los Angeles.] "Gopherus agassizzi and Geochelone carbonaria."

Darrow, Thomas Dean. ORIENTATION AND NAVIGATION IN THE ROUGH-SKINNED NEWT, TARICHA GRANULOSA. Ph.D. thesis, Oreg. State Univ. 74 p. 1967. [From Dissertation Abstr. 27(11B), 1967.] WR 128: 65

Duellman, William E. COURTSHIP ISOLATING MECHANISMS IN COSTA RICAN HYLID FROGS. Herpetologica 23(3): 169-183, 8 figs. 20 Sept. 1967. WR 128: 65
[Univ. Kans., Lawrence.] Conclusions: Observations on the mating behavior of ten sympatric species of hylid frogs at Puerto Viejo, Costa Rica, suggest that whereas mechanical isolation between some species is obvious, principally due to great differences in size, the more important isolating mechanisms are differences in behavior. Although each species has characteristic calling and oviposition sites, these sites are not necessarily exclusive. Consequently, these aspects of courtship and mating cannot be considered as primary ethological isolating mechanisms. The evidence provided by the present study strongly suggests that the differences in the mating calls are the primary mechanisms operating to prevent mismatings. Thus, the results of my study support the conclusions of Blair and his associates that the mating call is a highly significant isolating mechanism in sympatric species of frogs.

Evans, Kenneth J. OBSERVATIONS ON THE DAILY EMERGENCE OF COLEONYX VARIEGATUS AND UTA STANSBURIANA. Herpetologica 23(3): 217-222. 20 Sept. 1967. WR 128: 66
[Univ. Calif., Riverside.]

Herreid, Clyde F., II, and Stephen Kinney. TEMPERATURE AND DEVELOPMENT OF THE WOOD FROG, RANA SYLVATICA, IN ALASKA. Ecology 48(4): 579-590, 9 figs. Summer 1967. WR 128: 66
[Duke Univ., Durham, N.C.] Contains discussions of the following: embryonic development in laboratory, temperature tolerance, temperature preference, water analysis, timing of breeding, characteristics of eggs and egg masses, fertilization and early mortality of eggs, length and weight of larvae, metamorphosis, mortality during development, and adaptations to northern environments.--Courtesy/ Paul A. Stewart.

Johnson, Bob Duell. SOME INTERRELATIONSHIPS OF SELECTED CROTALUS AND AGKISTRODON VENOM PROPERTIES AND THEIR RELATIVE LETHALITIES. Ph.D. thesis, Ariz. State Univ. 88 p. 1967. [From Dissertation Abstr. 27(12B), 1967.] WR 128: 66
Venoms of the moccasin species Agkistrodon bilineatus, Agkistrodon contortrix mokeson, Agkistrodon piscivorus piscivorus, and the rattlesnake species Crotalus atrox, Crotalus basiliscus, Crotalus molossus, and Crotalus scutulatus were studied.

King, Wayne, and Thomas Krakauer. THE EXOTIC HERPETOFAUNA OF SOUTHEAST FLORIDA. Quart. J. Fla. Acad. Sci. 29(2): 144-154. 1967. [From Biol. Abstr. 48(17), 1967.] WR 128: 66
[Univ. Miami, Coral Gables, Fla.] This paper records the present local ranges of introduced spp. of amphibians and reptiles and gives data regarding the circumstances of introduction. Three exotic spp. of frogs and 12 lizards are established and breeding in southeast Florida. In addition a turtle, a crocodilian, 5 spp. of lizards, and a snake are established, although there is no evidence of their breeding. Details are given about 29 additional spp., unreported since their release.

Landreth, Hobart F., and Denzel E. Ferguson. NEWT ORIENTATION BY SUN-COMPASS. Nature 215(5100): 516-518, 2 figs. 29 July 1967. WR 128: 66
[Miss. State Coll., State College.]

Lee, David S. EGGS AND HATCHLINGS OF THE FLORIDA PINE SNAKE, PITUOPHIS MELANOLEUCUS MUGITUS. Herpetologica 23(3): 241-242. 20 Sept. 1967. WR 128: 66
[Fla. Southern Coll., Lakeland.]

Licht, Paul, and Allen G. Brown. BEHAVIORAL THERMOREGULATION AND ITS ROLE IN THE ECOLOGY OF THE RED-BELLIED NEWT, TARICHA RIVULARIS. Ecology 48(4): 598-611, 11 figs. Summer 1967. WR 128: 66
[Univ. Calif., Berkeley.] Aquatic larvae prefer temperatures of 20-26° C within a week of hatching. Aquatic adults avoid temperatures above 18-20° C. A loss of heat avoidance occurs after exposure to 23° C for several days. These results do not support previous conclusions that salamanders lack distinct thermal preferences and the ability to control body temperature.--From abstr. Courtesy/ Paul A. Stewart.

Loercher, Klaus. EINFLUSS DER WASSERTEMPERATUR AUF DIE PAARUNGSRUFE DER UNKEN. [EFFECT OF WATER TEMPERATURE ON MATING CALLS OF TOADS.] Naturwissenschaften 53(21): 559-560. 1966. [From Biol. Abstr. 48(17), 1967. In German.] WR 128: 66
Bombina bombina and B. variegata have similar mating calls. Males of both species emit single calls which represent tones. The 3 parameters of the calls-sequence, frequency and duration--vary under the influence of temperature. In both species frequency increases and duration decreases with increasing water temperature.

Munyer, Edward A. BEHAVIOR OF AN EASTERN HOGNOSE SNAKE, HETERODON PLATYRHINOS, IN WATER. Copeia 1967(3): 668-670, 1 fig. 1 Sept. 1967. WR 128: 67
[Vincennes Univ., Vincennes, Ind.]

Oplinger, Carl S. FOOD HABITS AND FEEDING ACTIVITY OF RECENTLY TRANSFORMED AND ADULT HYLA CRUCIFER CRUCIFER WIED. Herpetologica 23(3): 209-217. 20 Sept. 1967. WR 128: 67
[Muhlenberg Coll., Allentown, Pa.]

Parker, Gary E. THE INFLUENCE OF TEMPERATURE AND THYROXINE ON OXYGEN CONSUMPTION IN RANA PIPIENS TADPOLES. Copeia 1967(3): 610-616, 2 figs. 1 Sept. 1967. WR 128: 67
[Eastern Baptist Coll., St. Davids, Pa.]

Petzold, Hans-Günter. SOME REMARKS ON THE BREEDING BIOLOGY AND THE KEEPING OF TRETANORHINUS VARIABILIS, A WATER SNAKE OF CUBA. Herpetologica 23(3): 242-246, 3 figs. 20 Sept. 1967. WR 128: 67
[Berlin-Friedrichsfelde, Tierpark, Berlin, Germany.]

Pozzi, Alberto. GEONEMIA E CATALOGO RAGIONATO DEGLI ANFIBI E DEI RETTILI DELLA JUGOSLAVIA. [GEOGRAPHY AND REVISED CATALOGUE OF AMPHIBIANS AND REPTILES IN YUGOSLAVIA.] Natura (Milan) 57(1): 5-55. 1966. [From Biol. Abstr. 48(16), 1967. In Italian with English summ.] WR 128: 67

Pyburn, William F. BREEDING AND LARVAL DEVELOPMENT OF THE HYLID FROG PHRYNOHYAS SPILOMMA IN SOUTHERN VERACRUZ, MÉXICO. Herpetologica 23(3): 184-194, 6 figs. 20 Sept. 1967. WR 128: 67
[Univ. Texas, Arlington.]

Rand, A. Stanley. COMMUNAL EGG LAYING IN ANOLINE LIZARDS. Herpetologica 23 (3): 227-230. 20 Sept. 1967. WR 128: 67
[Smithsonian Tropical Res. Inst., Box 2072, Balboa, Canal Zone.]

Rand, A. Stanley. ECOLOGY AND SOCIAL ORGANIZATION IN THE IGUANID LIZARD ANOLIS LINEATOPUS. Proc. U.S. Natl. Museum 122(3595): 1-79, 10 figs. 1967. WR 128: 67
[Box 2072, Balboa, Panama Canal Zone.] "This paper reports the findings of a 10-month (August 1961 to June 1962) field study of the ecology and behavior, particularly the social behavior, of Anolis lineatopus, in edificarian situations, in the vicinity of Kingston, Jamaica."

Rose, Francis L. SEASONAL CHANGES IN LIPID LEVELS OF THE SALAMANDER AMPHIUMA MEANS. Copeia 1967(3): 662-666, 4 figs. 1 Sept. 1967. WR 128: 67
[Texas Tech. Coll., Lubbock.]

Sanyal, M. K., and M. R. N. Prasad. REPRODUCTIVE CYCLE OF THE INDIAN HOUSE LIZARD, HEMIDACTYLUS FLAVIVIRIDIS RÜPPELL. Copeia 1967(3): 627-633, 3 figs. 1 Sept. 1967. WR 128: 67
[Univ. Delhi, Delhi, India.]

Sicharulidze, N. I. [STUDIES OF CHARACTERISTICS OF BEHAVIOUR IN REPTILES (TURTLES).] Soobshch. Akad. Nauk Gruz. SSR 43(3): 757-764, illus. 1966. [From Biol. Abstr. 48(17), 1967. In Georgian with Russian summ.] WR 128: 67

Starrett, Priscilla. OBSERVATIONS ON THE LIFE HISTORY OF FROGS OF THE FAMILY ATELOPODIDAE. Herpetologica 23(3): 195-204, 6 figs. 20 Sept. 1967. WR 128: 67
[Univ. Southern Calif., Los Angeles.]

Stewart, M. M. HERPETOFAUNA OF THE NYIKA PLATEAU (MALAWI AND ZAMBIA). Ann. Natal Museum 18(2): 287-331. 1966. [From Biol. Abstr. 48(16), 1967.] WR 128: 68
[State Univ. N.Y., Albany.]

Turcek, Frantisek J. JASTERICA ZIVORODA LACERTA VIVIPARA JACQUIN NA ZITNOM OSTROVE. [VIVIPAROUS LIZARDS (FOREST OR MOOR) LACERTA VIVIPARA JACQUIN ON THE SCHUETT ISLAND.] Biologia (Bratislava) 21(9): 693. 1966. [From Biol. Abstr. 48(12), 1967. In Czech.] WR 128: 68
[Ustav. Biol. Krajiny, Banska Stiavnica, Czechoslovakia.]

Twitty, Victor, David Grant, and Oscar Anderson. HOME RANGE IN RELATION TO HOMING IN THE NEWT TARICHA RIVULARIS (AMPHIBIA: CAUDATA). Copeia 1967(3): 649-653, 3 figs. 1 Sept. 1967. WR 128: 68
[Stanford Univ., Stanford, Calif.] Abstract: Recaptures of Taricha rivularis in their breeding streams and in land traps over a period of several years served to define the approximate limits of the home ranges of large groups of marked animals. When displaced far beyond these limits, within the home stream or to foreign one, the animals home successfully by oriented migration.

Varona, Luis S. NOTAS SOBRE LOS CROCODILIODOS DE CUBA Y DESCRIPCIÓN DE UNA NEUVA ESPECIE DEL PLEISTOCENO. [NOTES ON CROCODILIA OF CUBA AND DESCRIPTION OF A NEW PLEISTOCENE SPECIES.] Poeyana, Ser. A 16: 1-34. 1966. [From Biol. Abstr. 48(17), 1967. In Spanish with English summ.] WR 128: 68
[Inst. Biol., Havana, Cuba.] Includes previously unrecorded information concerning morphology, variation, distribution, behavior and ecology of the known species of Cuban crocodiles.

Vidal, Antonio. ESTUDIO BIOLÓGICO DE LAS ISLAS PITIUSAS: ANIFIBIOS. [A BIOLOGIC STUDY OF PITYUSEN ISLANDS: AMPHIBIA.] Publicaciones Inst. Biol. Apl. 40: 81-112, illus. 1966. [From Biol. Abstr. 48(13), 1967. In Spanish with English and German summ.] WR 128: 68
[Consejo Super. Invest. Cient., Barcelona, Spain.]

INVERTEBRATES

Boswall, Jeffery. A DISCOGRAPHY OF PALEARCTIC INSECT SOUND RECORDINGS. Entomol. Record 78: 202-206. 15 Sept. 1966. WR 128: 68
[British Broadcasting Corp., Bristol, England.]

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